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SOFTWARE MAINTENANCE MANUAL FOR THE MODULAR SYSTEM CONTROL DEVE--ETC(U)

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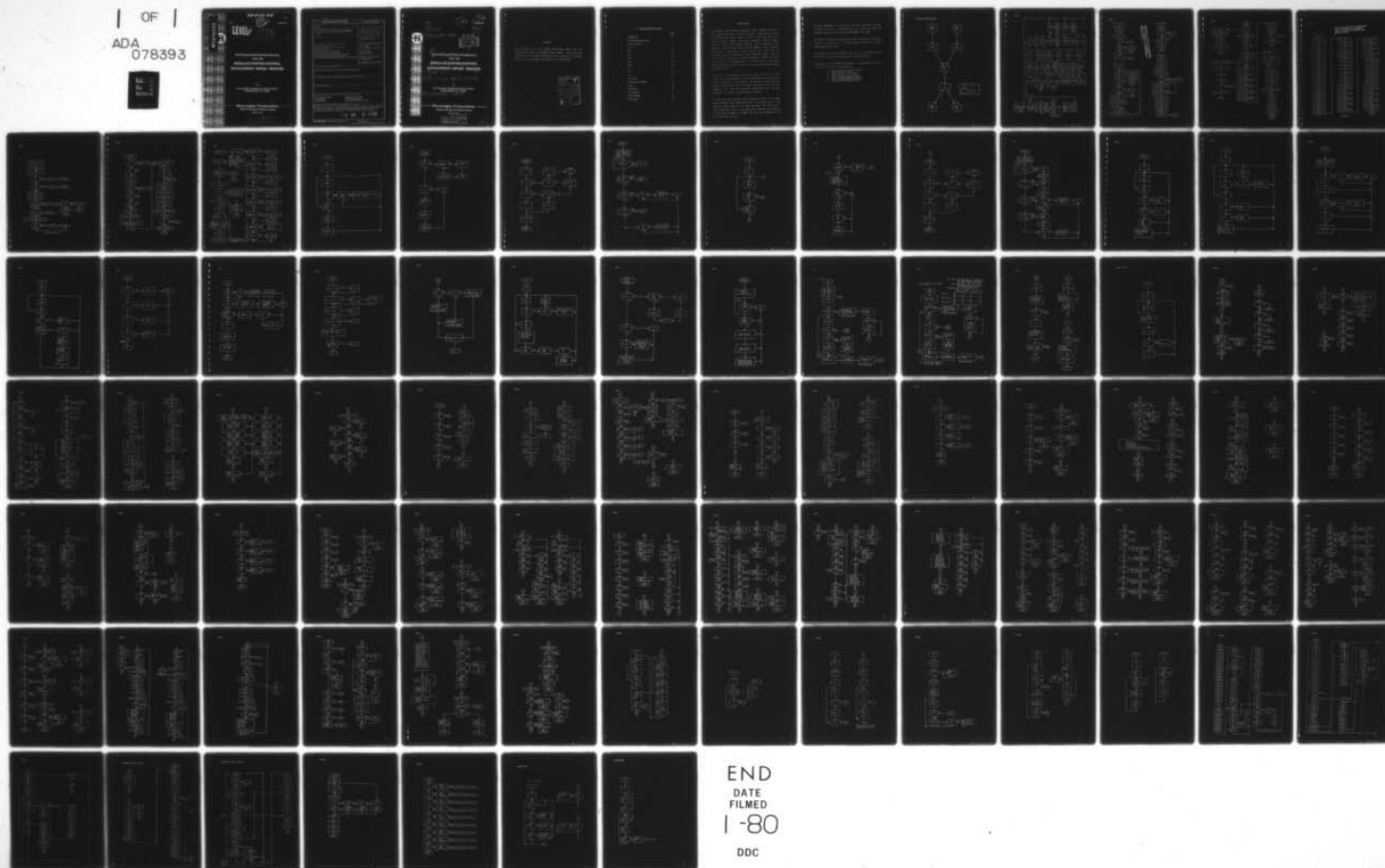
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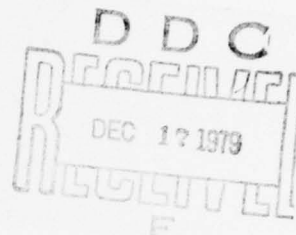
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Book 3

November 1979

LEVEL III



**SOFTWARE MAINTENANCE MANUAL  
FOR THE  
MODULAR SYSTEM CONTROL  
DEVELOPMENT MODEL (MSCDM)**

for

**THE DEFENSE COMMUNICATIONS AGENCY  
WASHINGTON, D.C. 20305**

**Burroughs Corporation**  
**Federal and Special Systems Group**

Paoli, Pa. 19301

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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 66159	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Software Maintenance Manual for the Modular System Control Development Model (MSCDM) Book 3		5. TYPE OF REPORT & PERIOD COVERED FINAL Sep 76 - Nov 79
7. AUTHOR(s)		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Burroughs Corporation Federal and Special Systems Group Paoli, PA 19301		8. CONTRACT OR GRANT NUMBER(s) DCA100-76-C-0083
11. CONTROLLING OFFICE NAME AND ADDRESS Defense Communications Agency Defense Communications Engineering Center 1860 Wiehle Ave., Reston, VA 22090		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS PE 33126 T&CCP 3012 Task 15203
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE November 1979
		13. NUMBER OF PAGES 87
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)  Approved for Public Release; Distribution Unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)  <div style="display: flex; justify-content: space-between;"> <div> Program Flow Charts  Loop Network  Ring Network </div> <div> Modular Architecture  DCS System Control  Distributed Computer System </div> </div>		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Program flow charts for each Modular System Control Development Model (MSCDM) program is presented. Flow charts for all operating system, application, diagnostic and utility programs are included in this single volume.		

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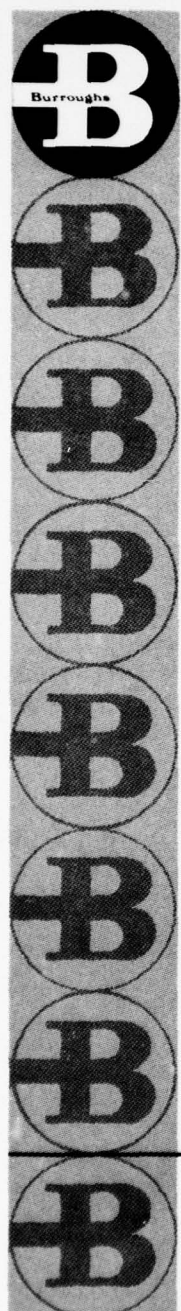
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### Foreword

This publication is the Software Maintenance Manual for the Modular System Control Development Model (MSCDM). This manual was prepared by the Burroughs Corporation and is submitted in accordance with the requirements of Contract DCA 100-76-C-0083.

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## 5.0 MSCDM SOFTWARE FLOW CHARTS

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## INTRODUCTION

The Modular System Control Development Model (MSCDM) consists of nine functional nodes: Station-to-Station Communications Interface (SSCI), Voice Service Quality Control (VSQC), Digital Service Quality Control (DSQC), Data Base Management Service (DBMS), Operator Control and Report Interface (OCRI), Baseband Signal Analysis and Wide Band Signal Analysis (BWBSA), Fault Isolation and Control Coordination (FIAC), Switch Data Collection and Analysis (SDCA), and Simulated Input Generator (SIG). Each of these nodes is implemented using microcomputer hardware and software, and node intercommunication is performed via a Burroughs loop architecture under control of a distributed master control program (DMCP).

Each node can communicate with any other node on the loop; however, the nodal software for the MSCDM application defines the flow of information in the system. For example, the OCRI terminal normally communicates with the DBMS node, which runs the User Language. The other ESM terminals communicate with the User Language via the loop 4-5 gateway Node 21 (SSCI).

A simulated input generator (SIG) generates inputs to the VSQC, DSQC and BWBSA, which communicate faults to the FIAC module. FIAC generates event reports to the OCRI and DBMS. The PDP 11/40 in loop 2 generates inputs to the SDCA which generates fault reports to the OCRI and DBMS. The DBMS, OCRI and FIAC communicate with the other loops via SSCI.

An LA36 DECWRITER is be used as the OCRI hard-copy terminal attached to node 25. A VT52 DECSCOPE is be used as a local CRT terminal connected to the Program Development Unit (PDU).

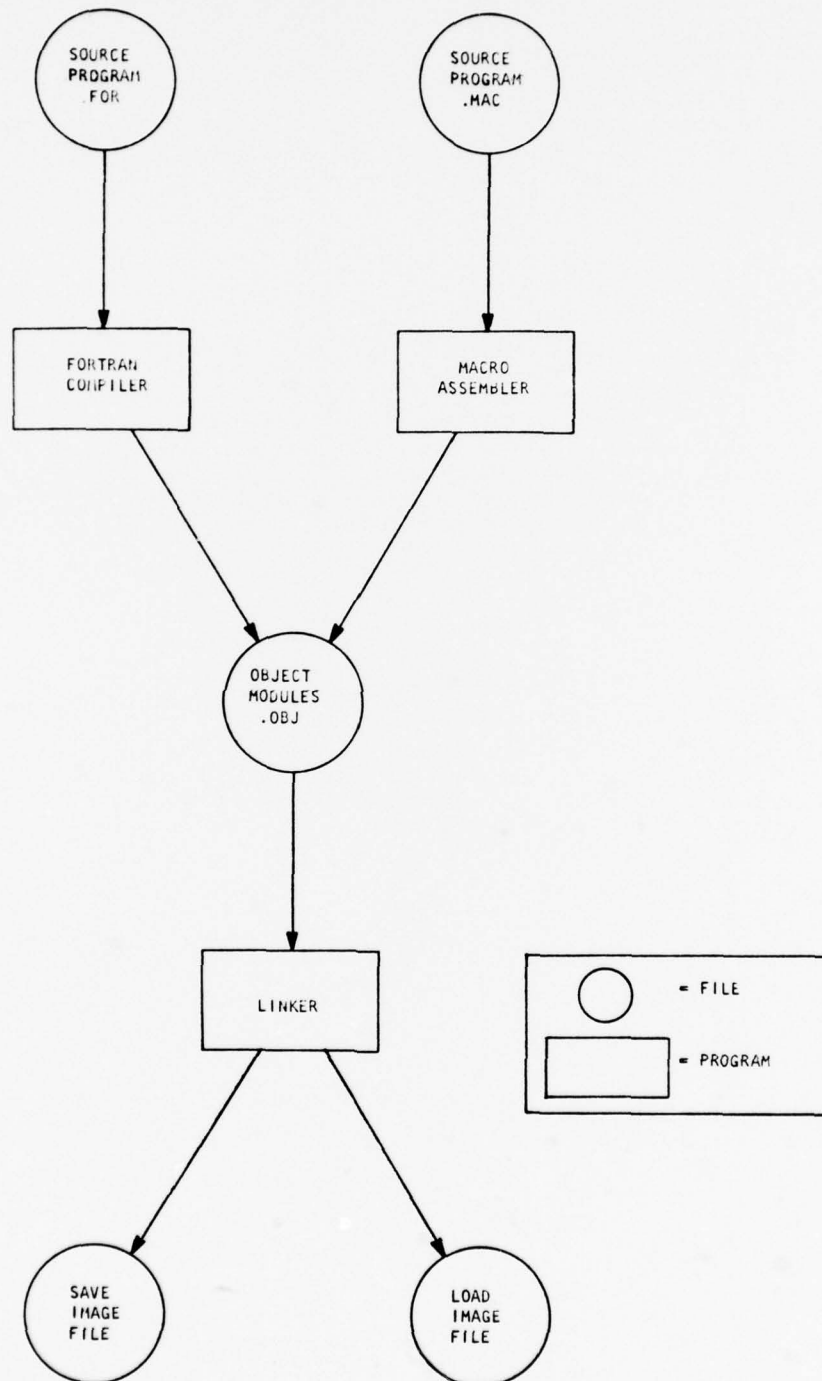
The Digital Equipment Corporation System's software for the PDP-11/V03 is contained on 9 - Floppy diskettes conforming to DEC's RX01 Floppy drive format.

The MSCDM applications software which runs on the PDP-11/V03 and the LSI-11/2 nodes is contained on 21- floppy diskettes.

References for the FORTRAN and MACRO-11 languages and the PDP-11/V03 system used include documentation:

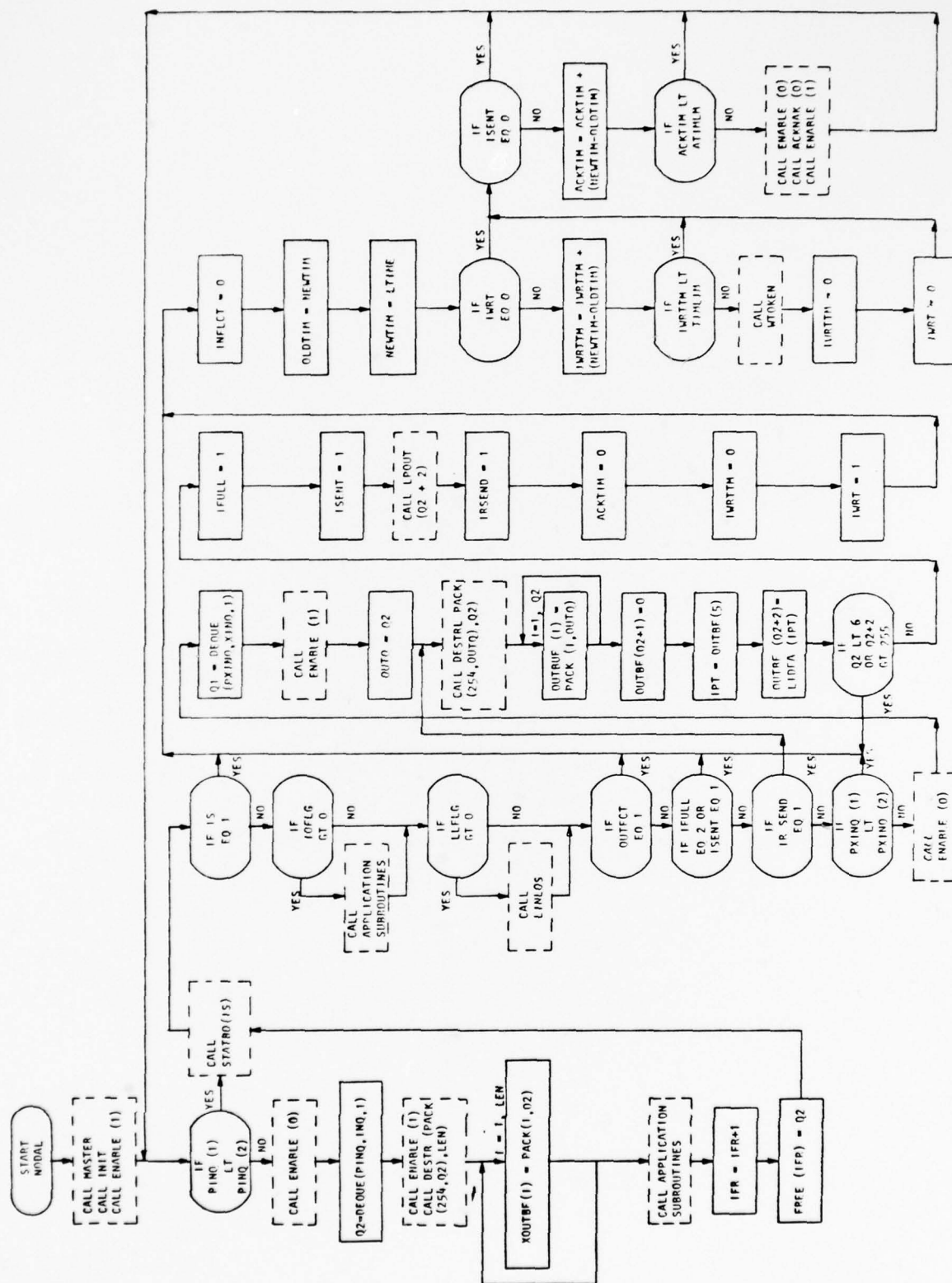
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2. "Introduction to RT11"
3. "RT-11 System User's Guide"
4. "RT-11 System Message Manual"
5. "PDP-11 MACRO Language Manual"
6. "PDP-11 FORTRAN Language Manual"
7. "Advanced Programmer's Guide"

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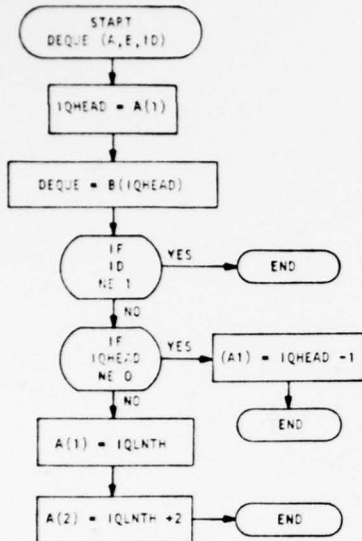


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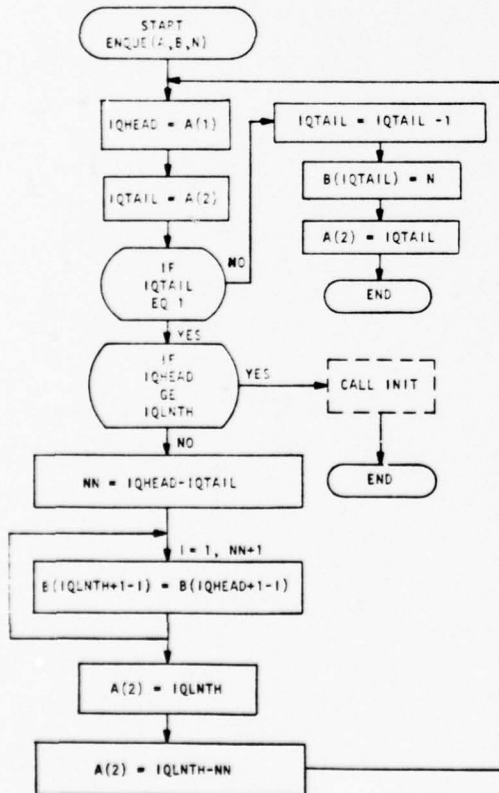


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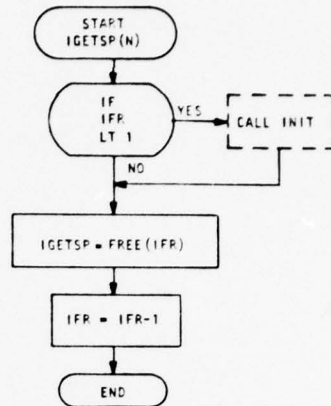
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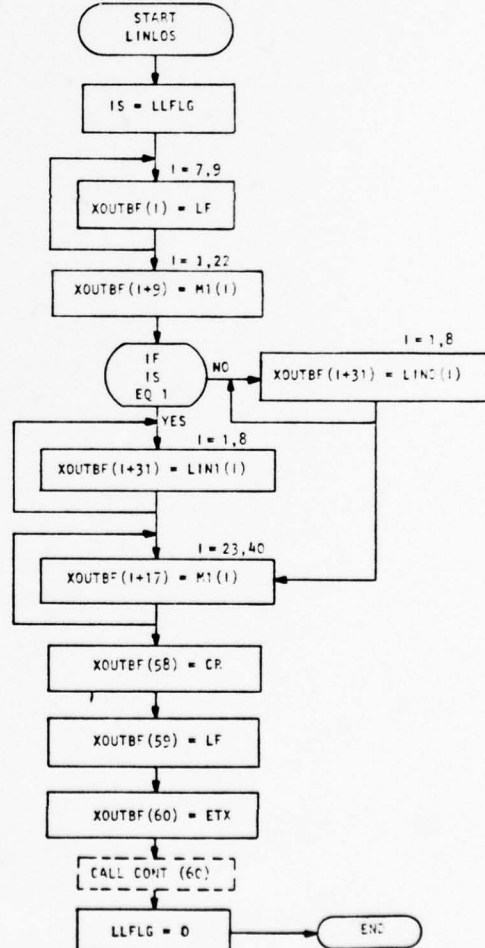
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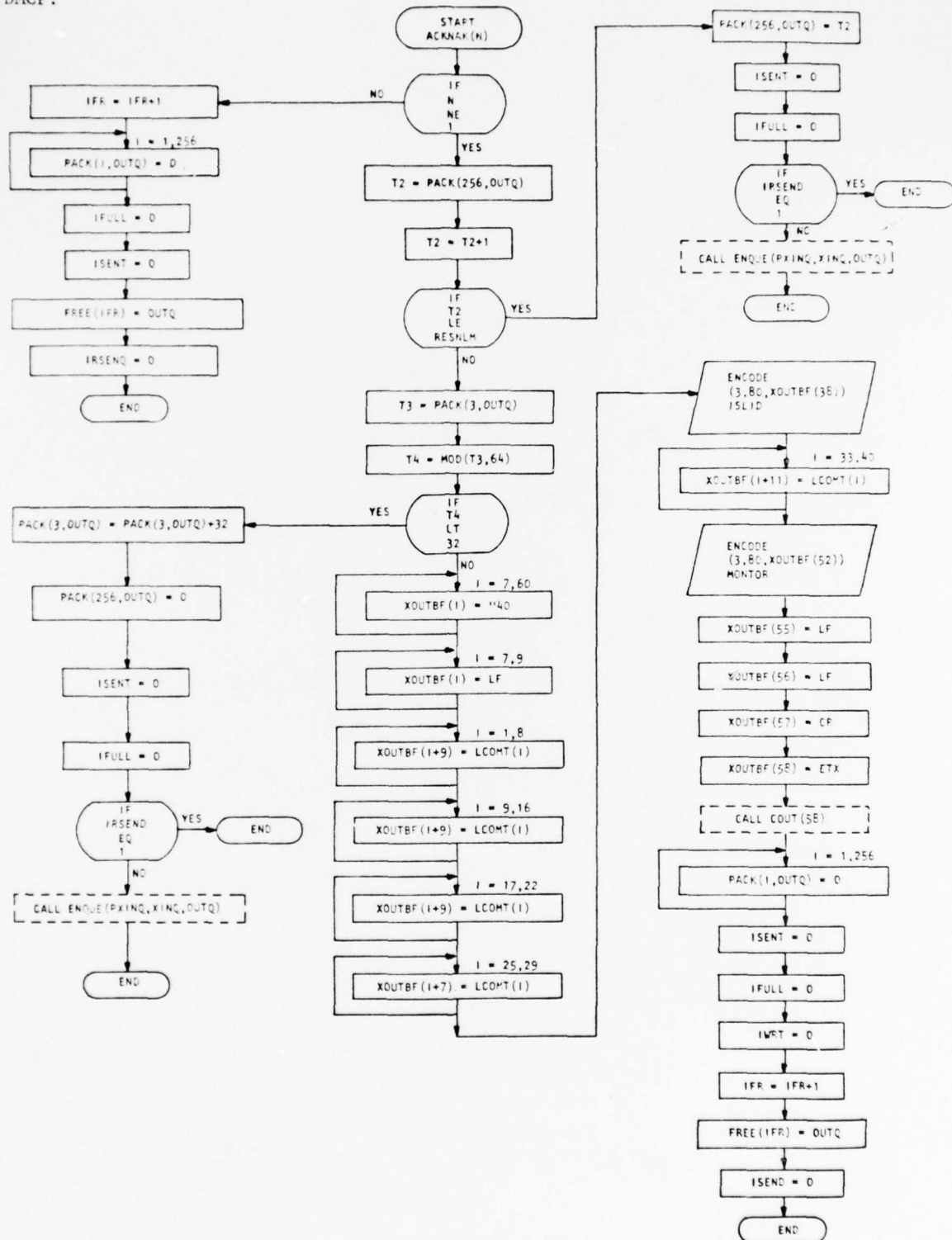


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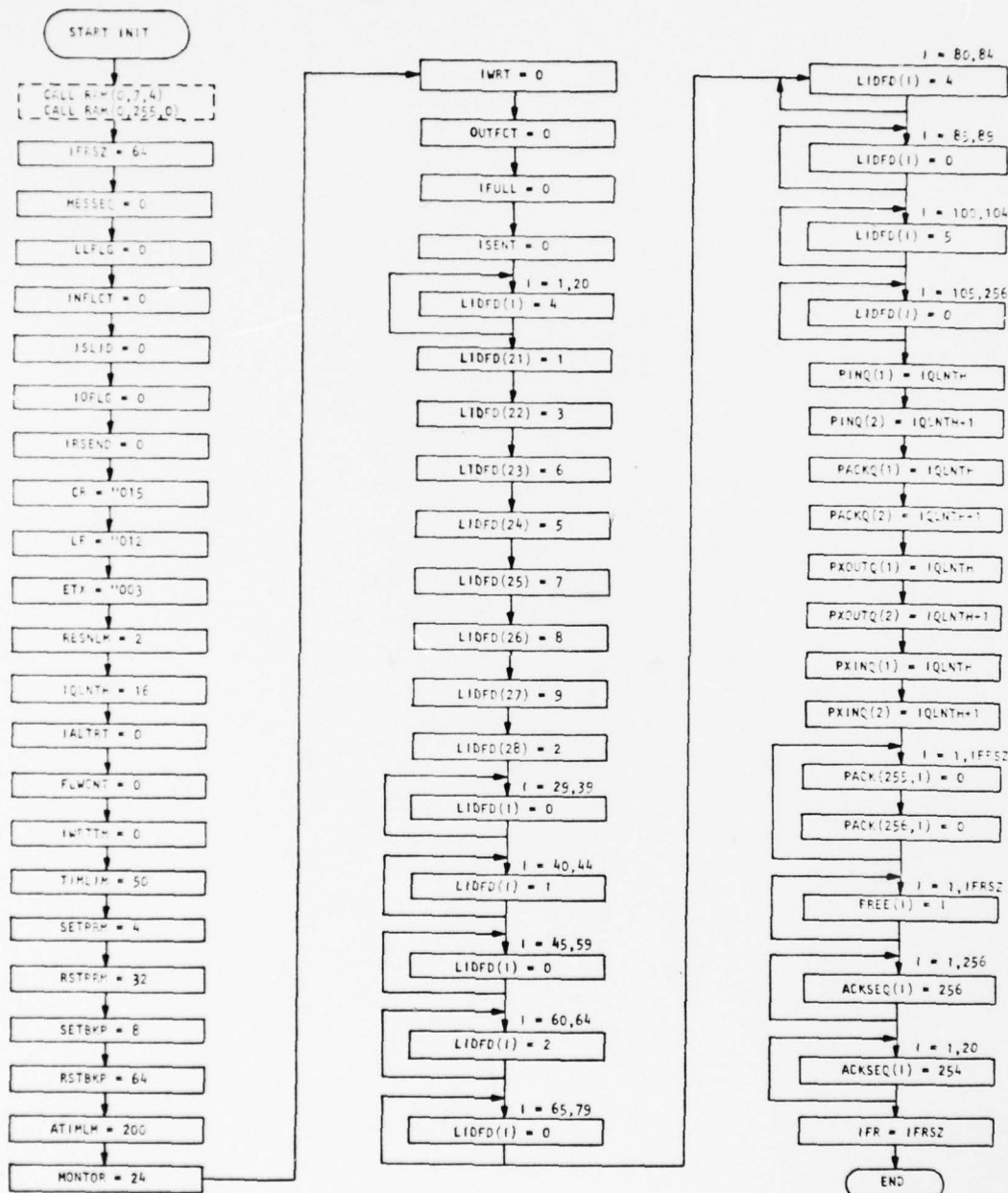
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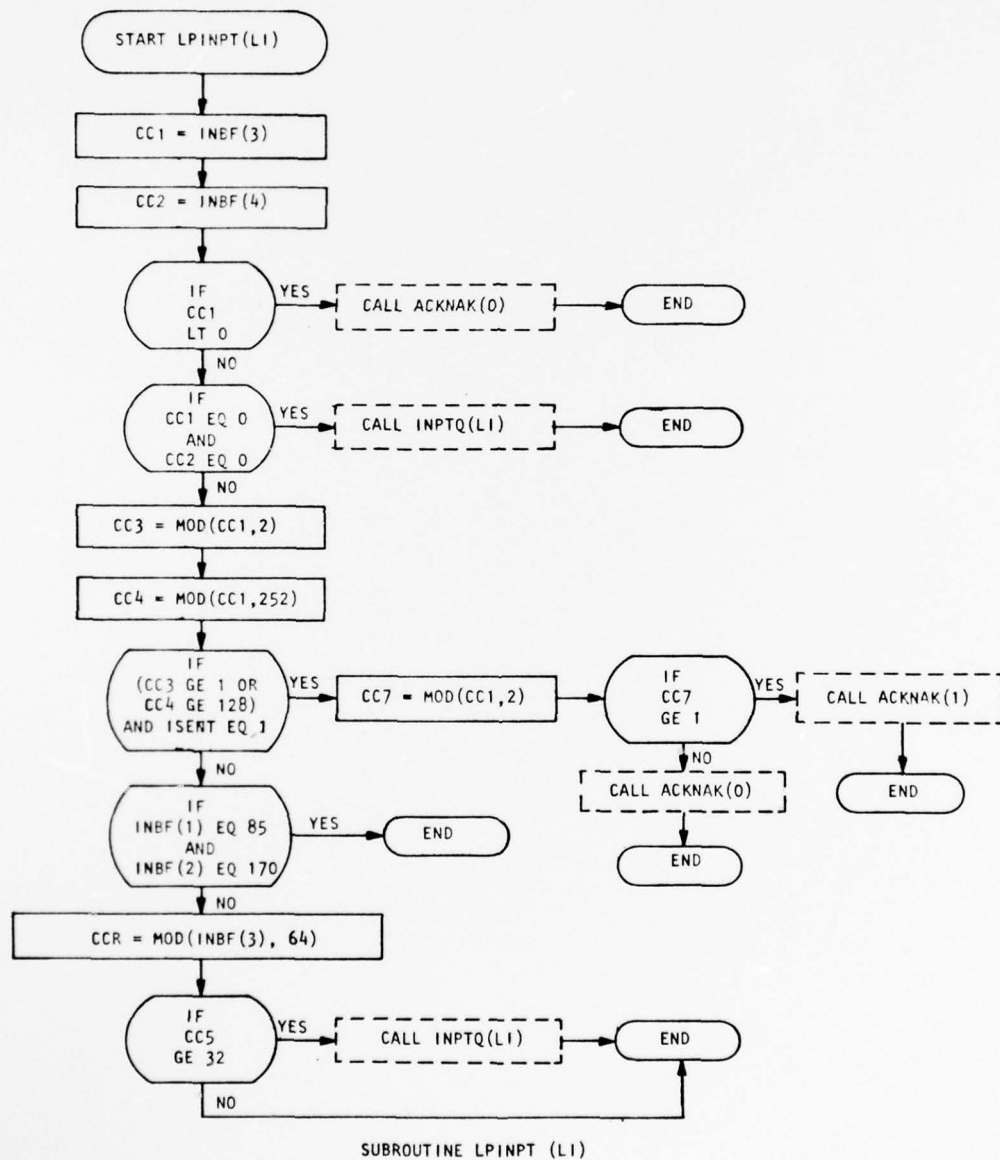
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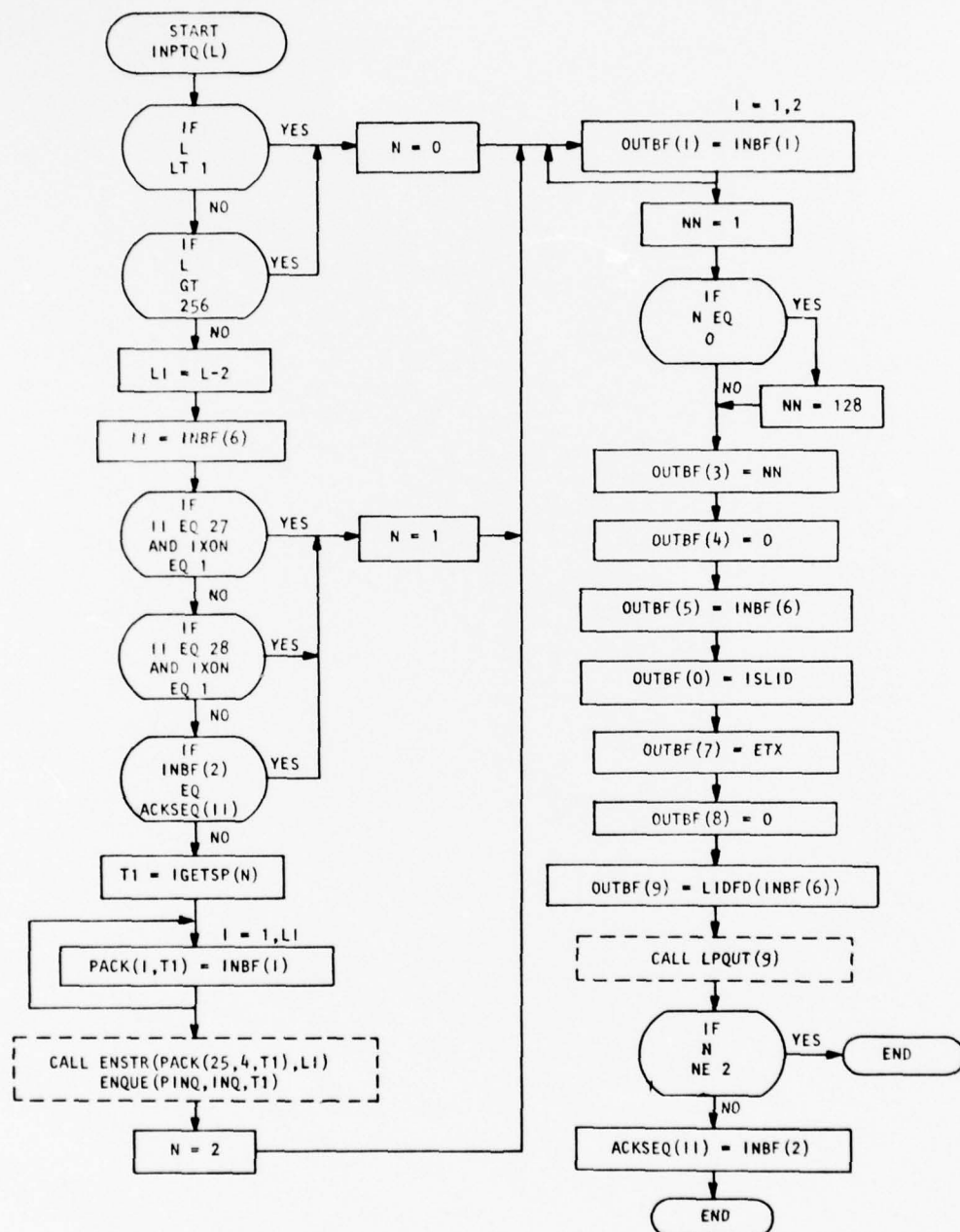
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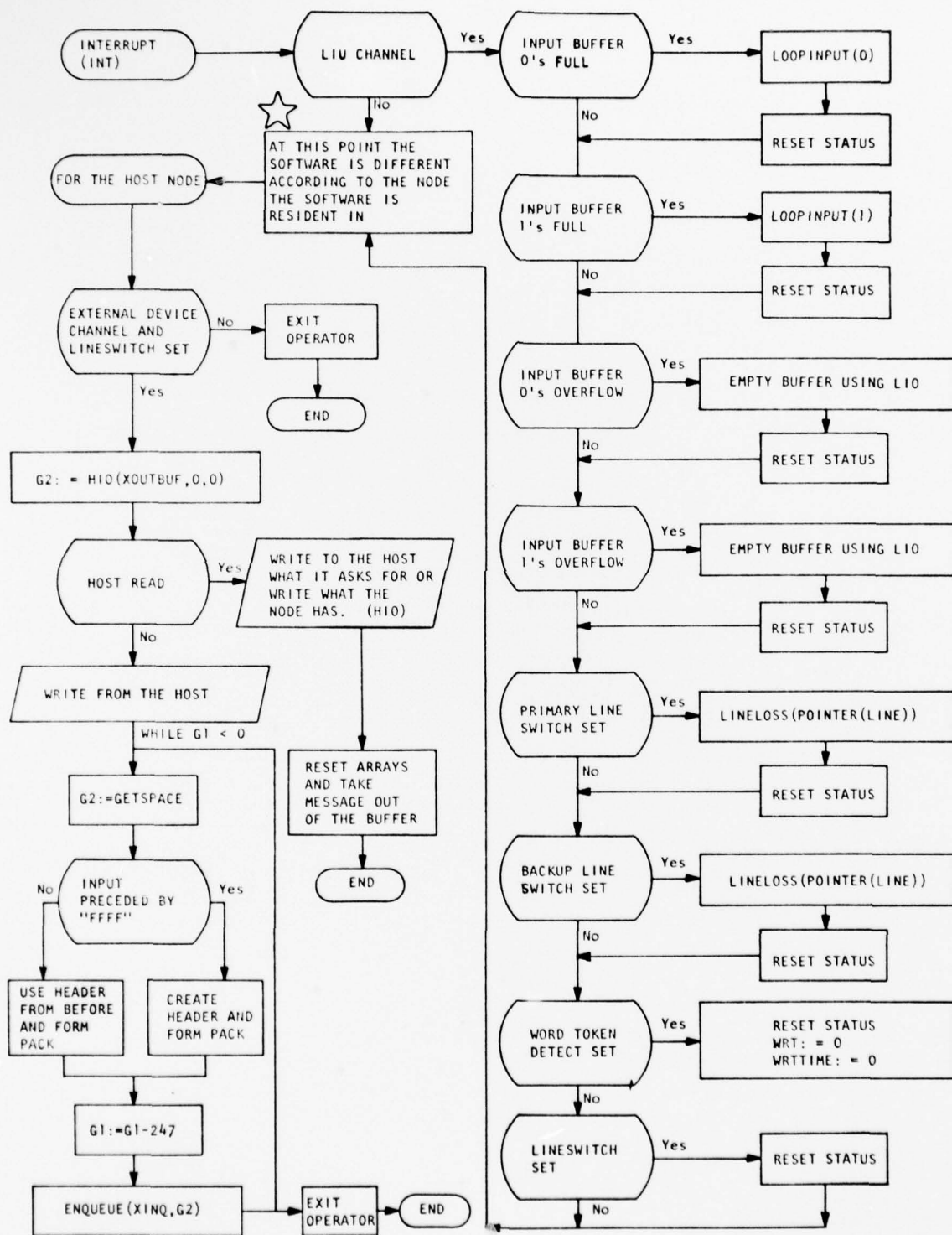




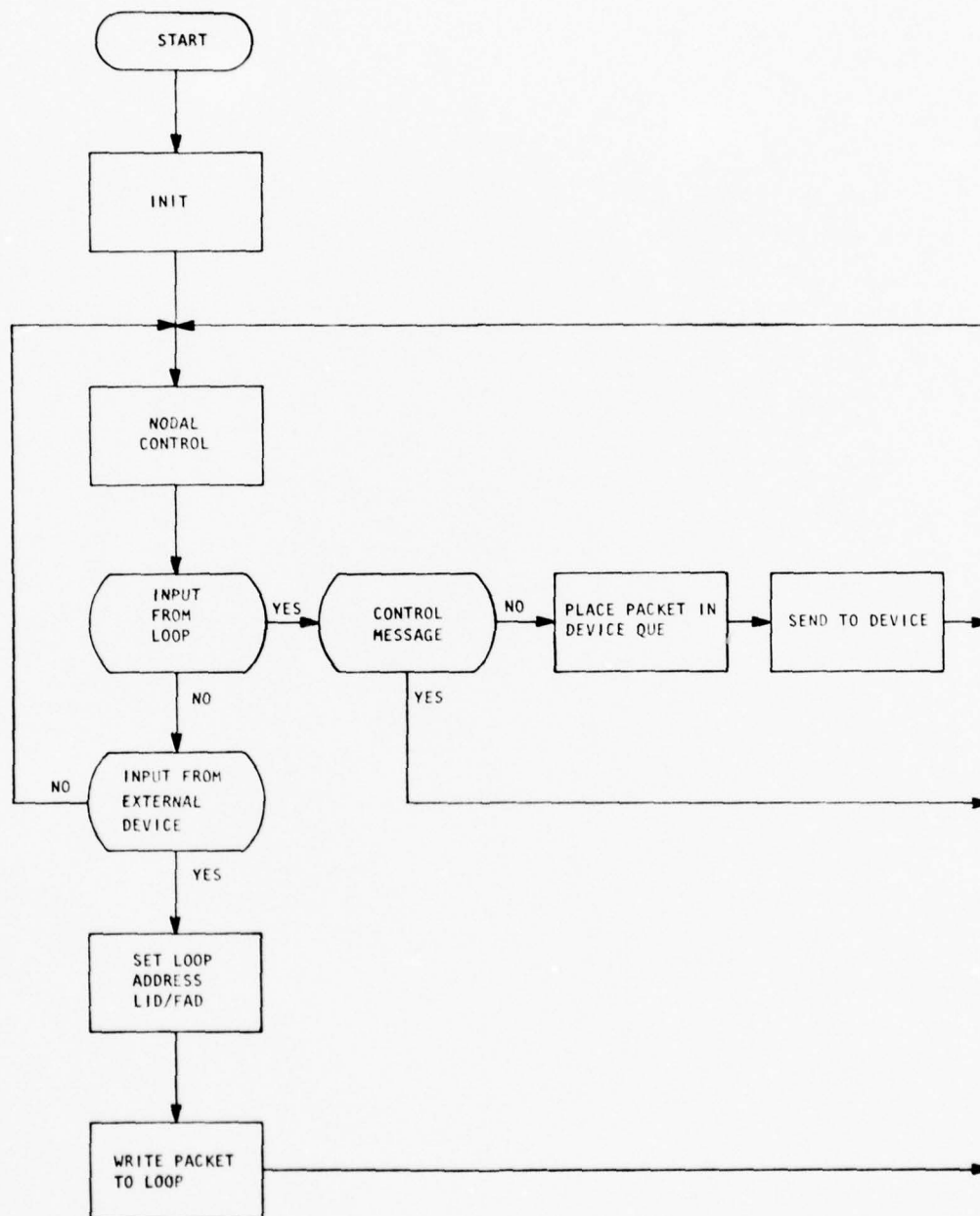
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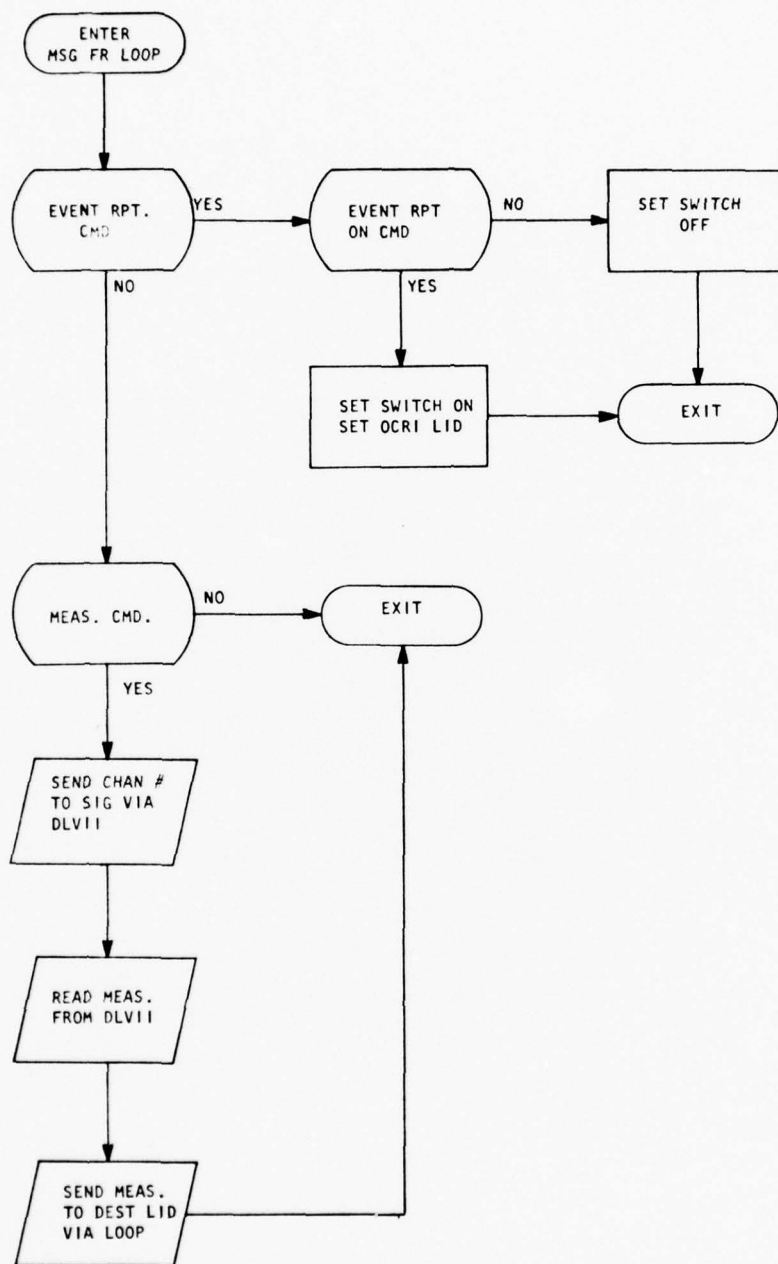
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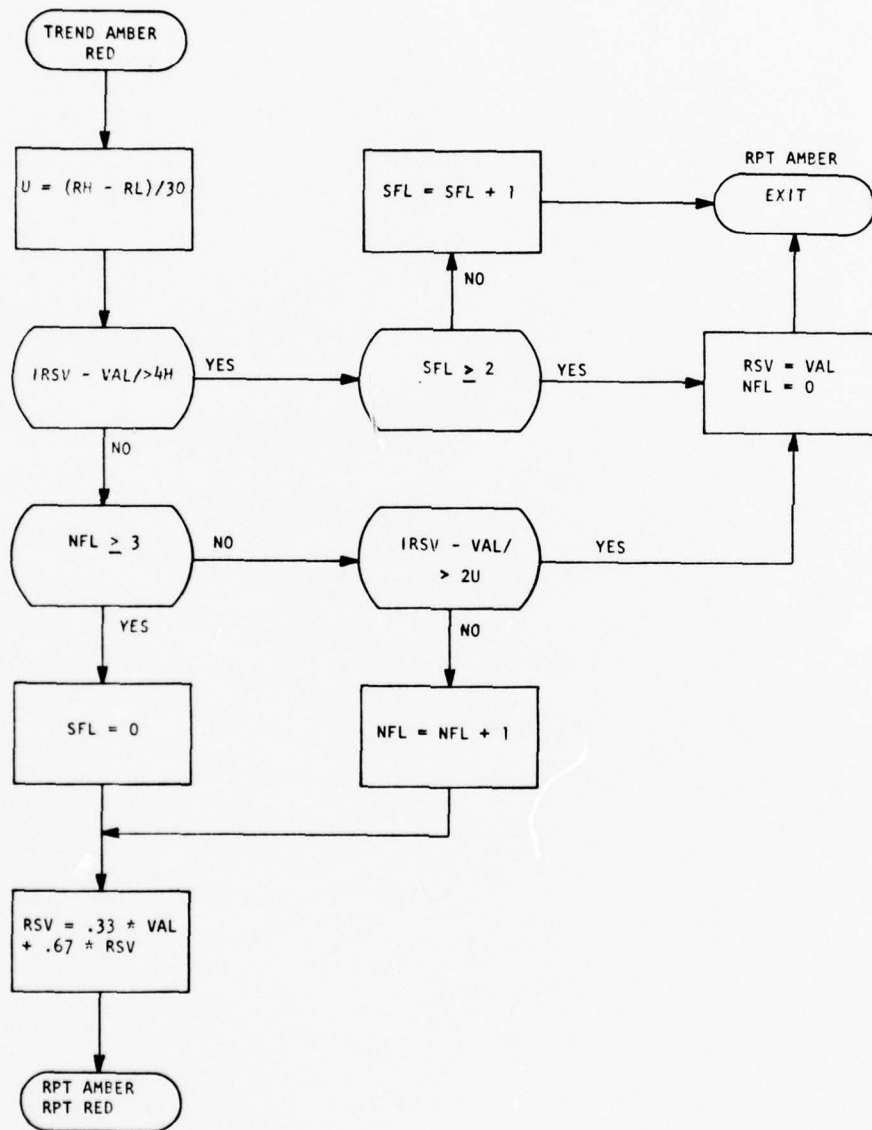
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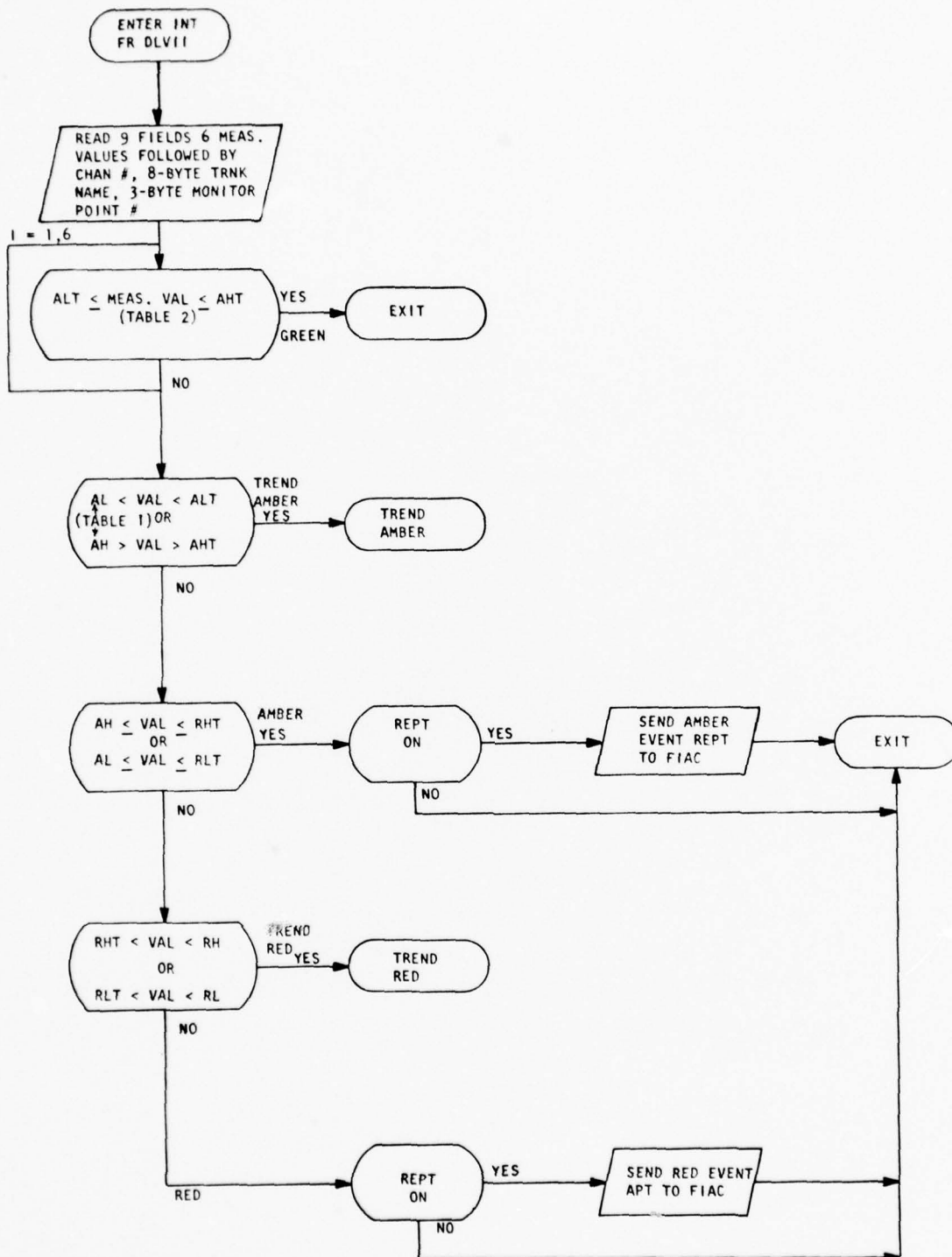


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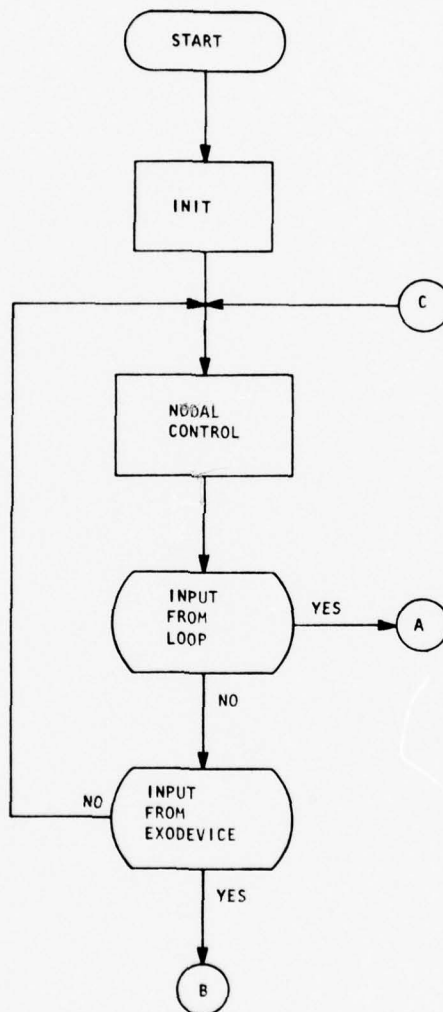




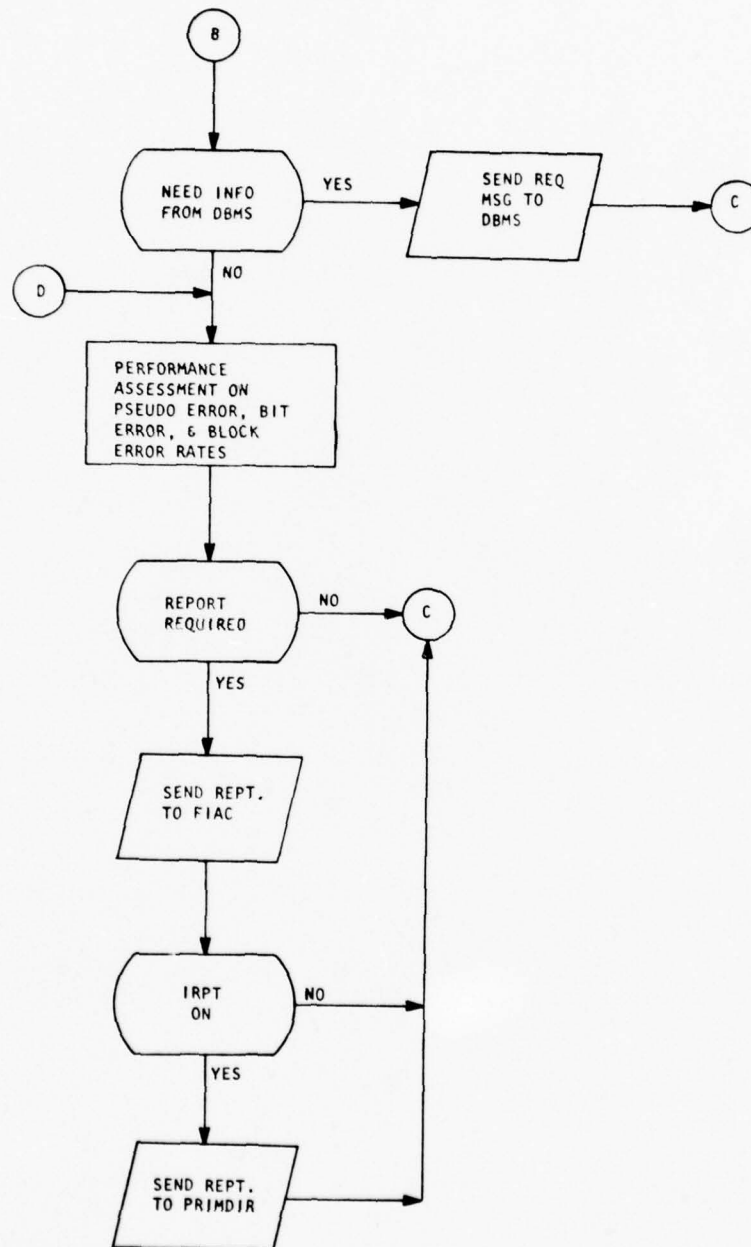
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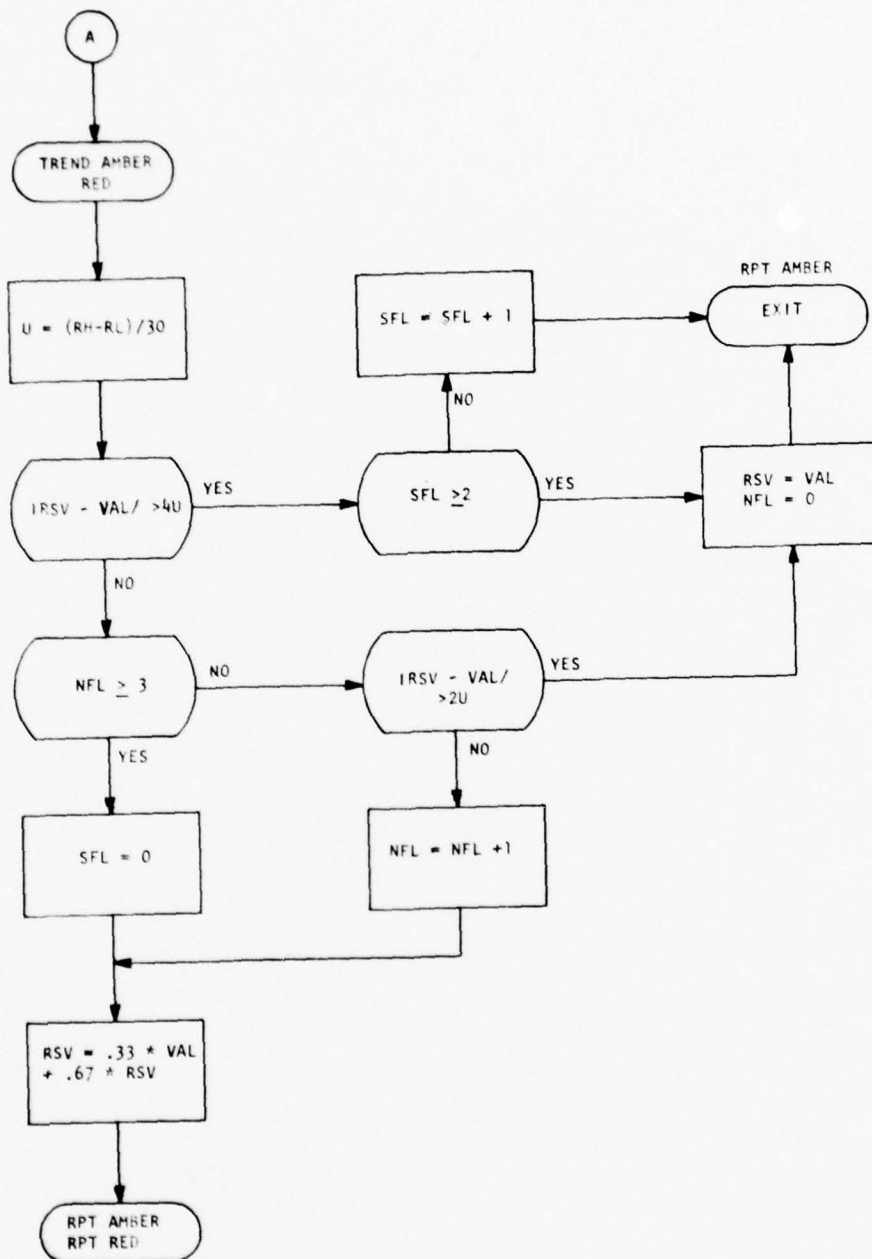
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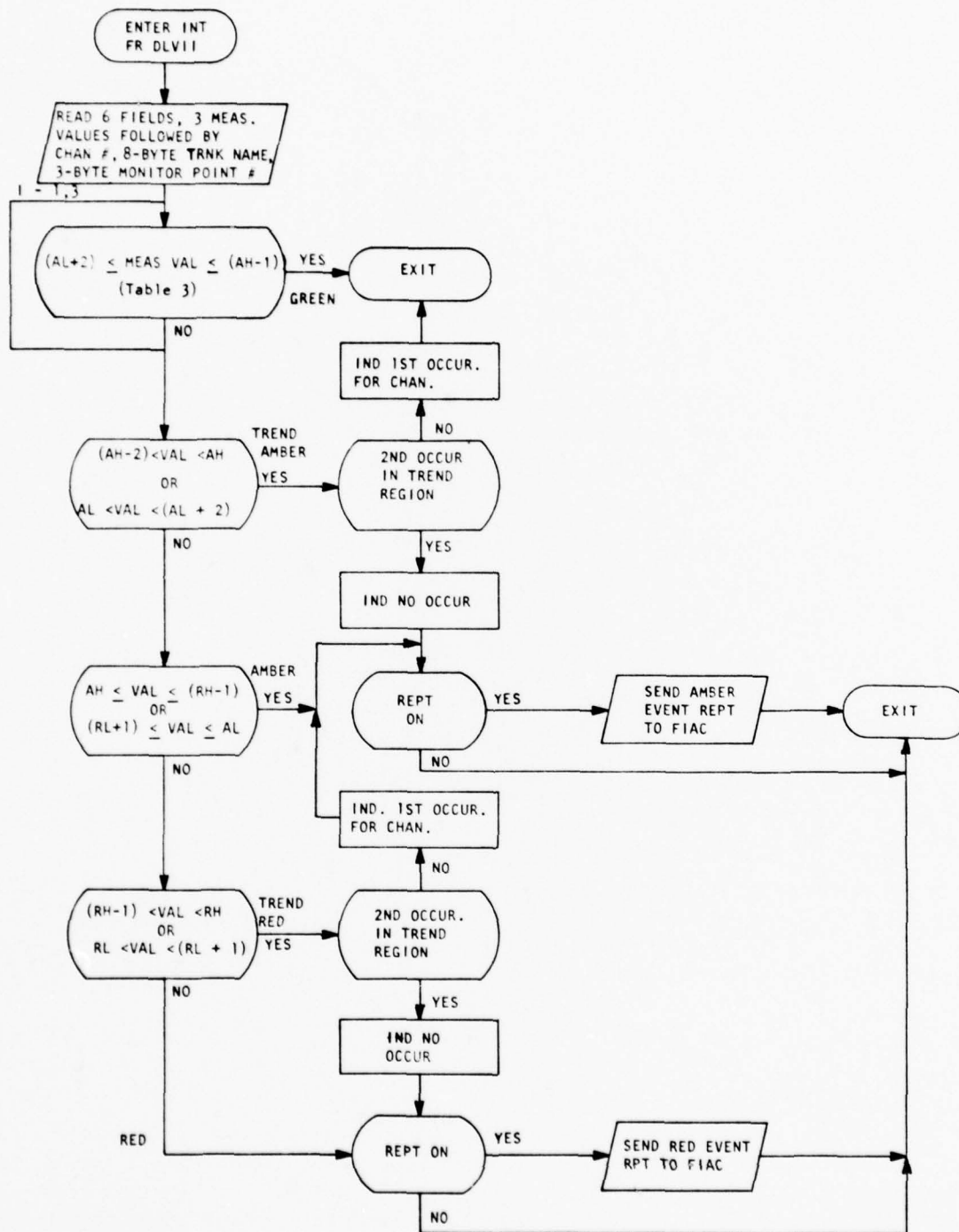
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DSQC:

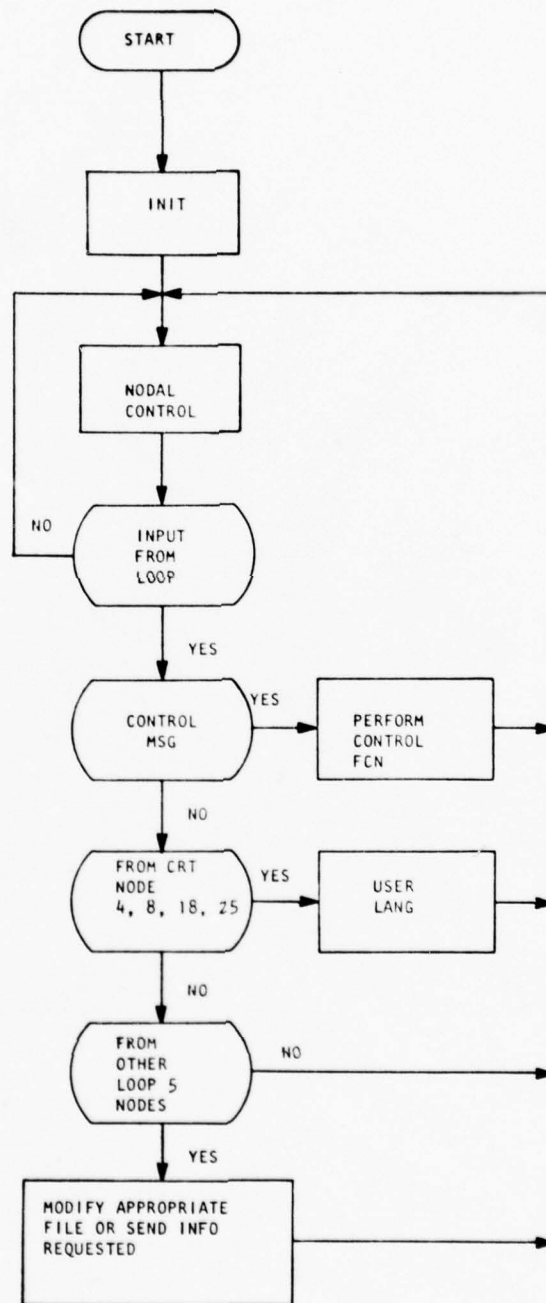


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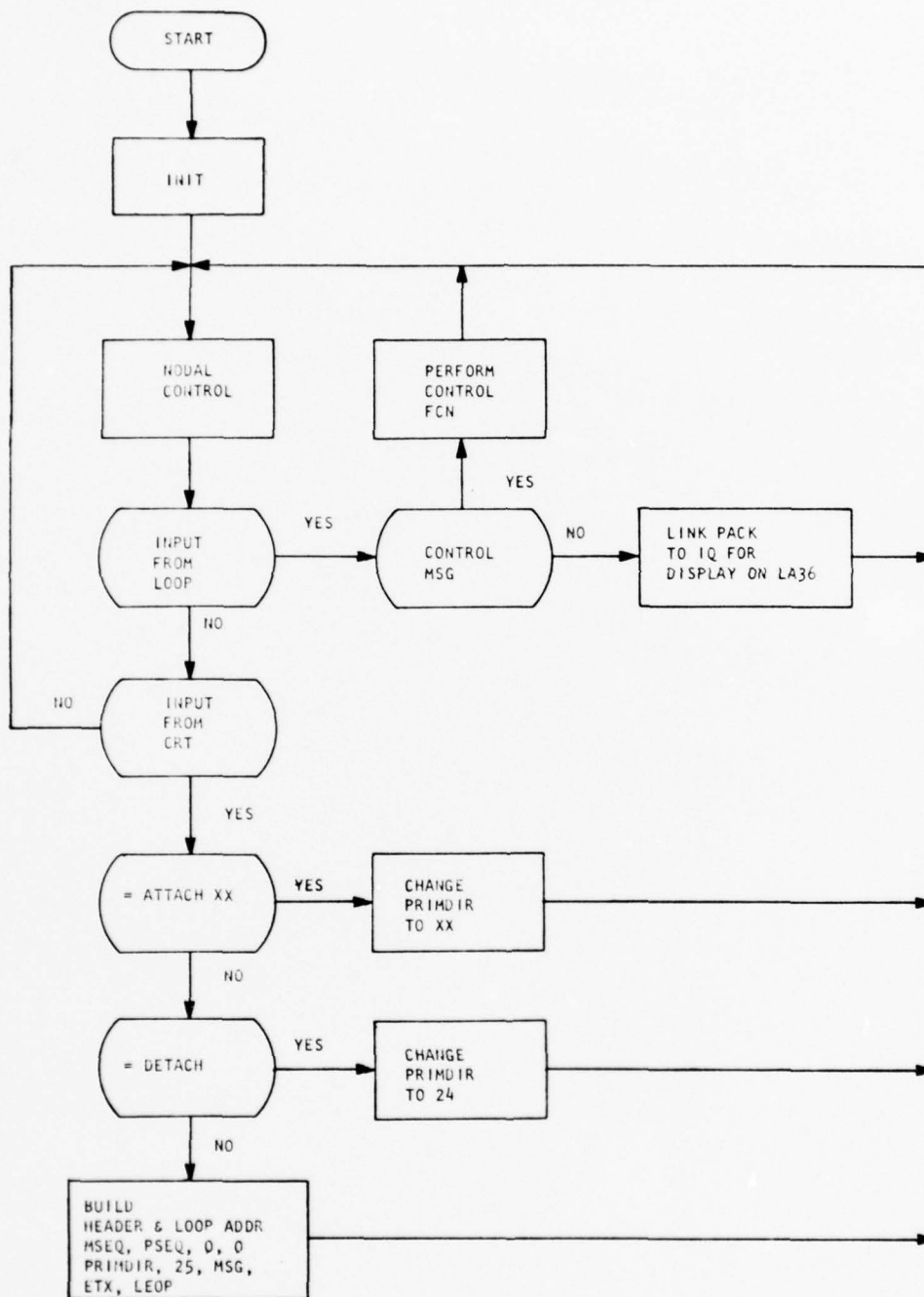




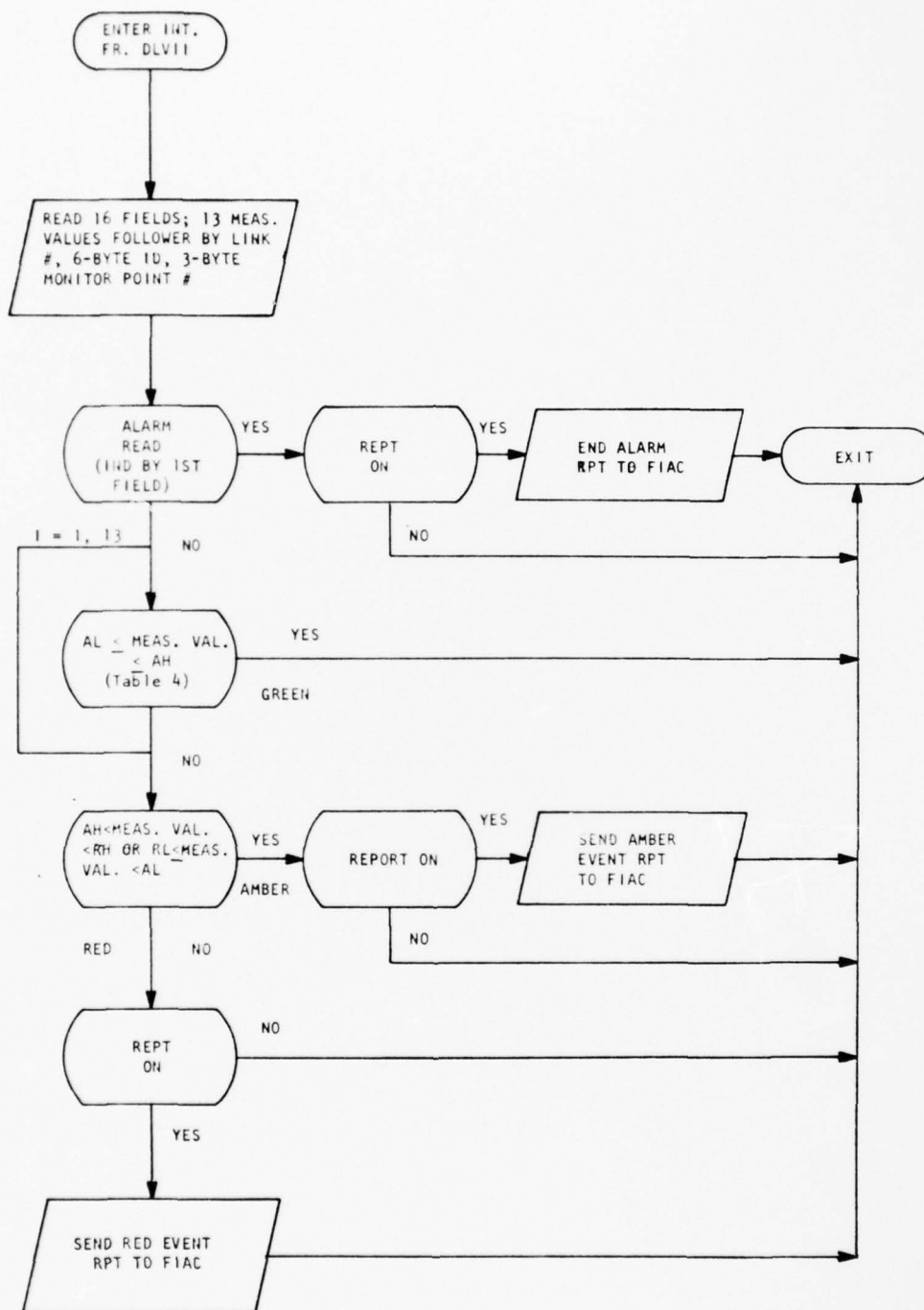
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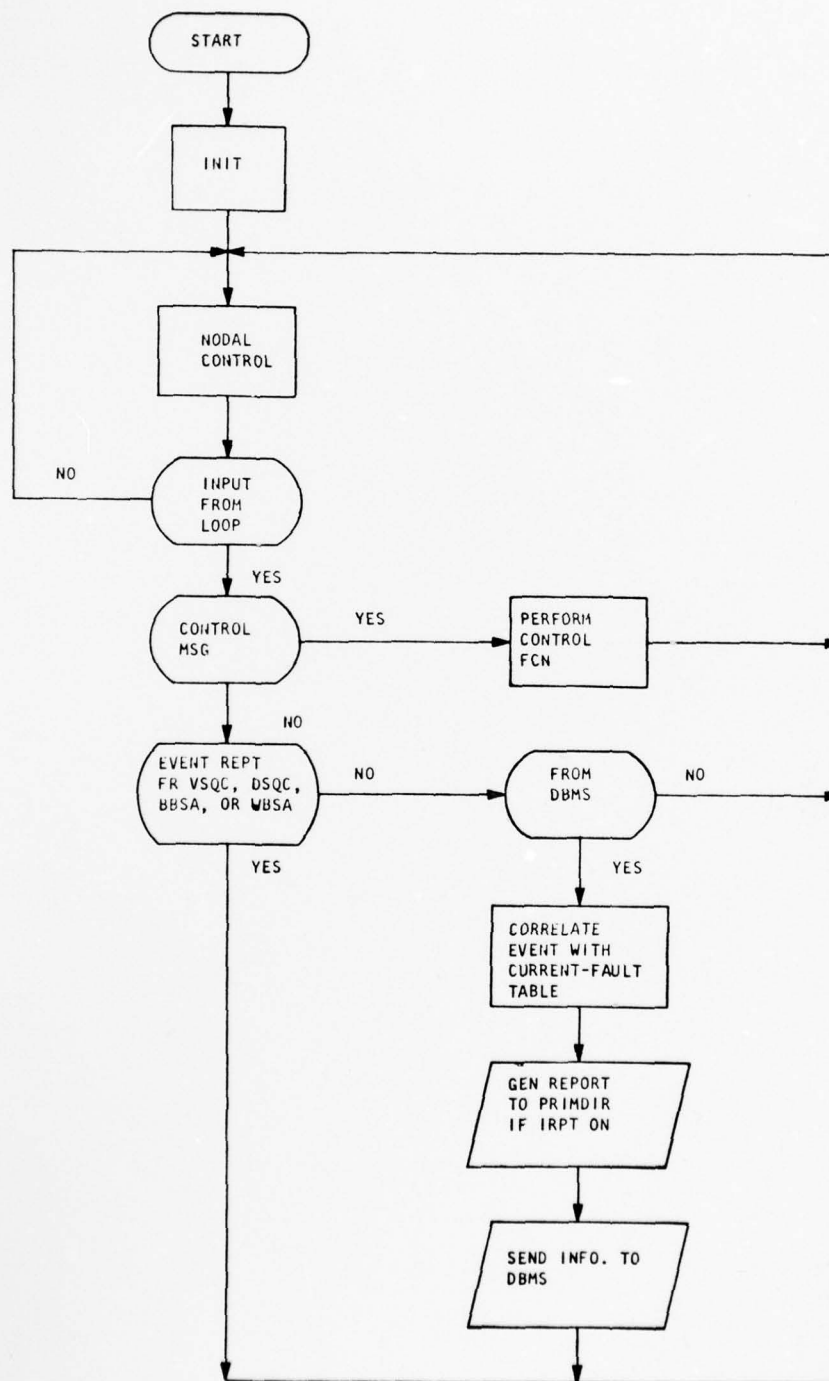
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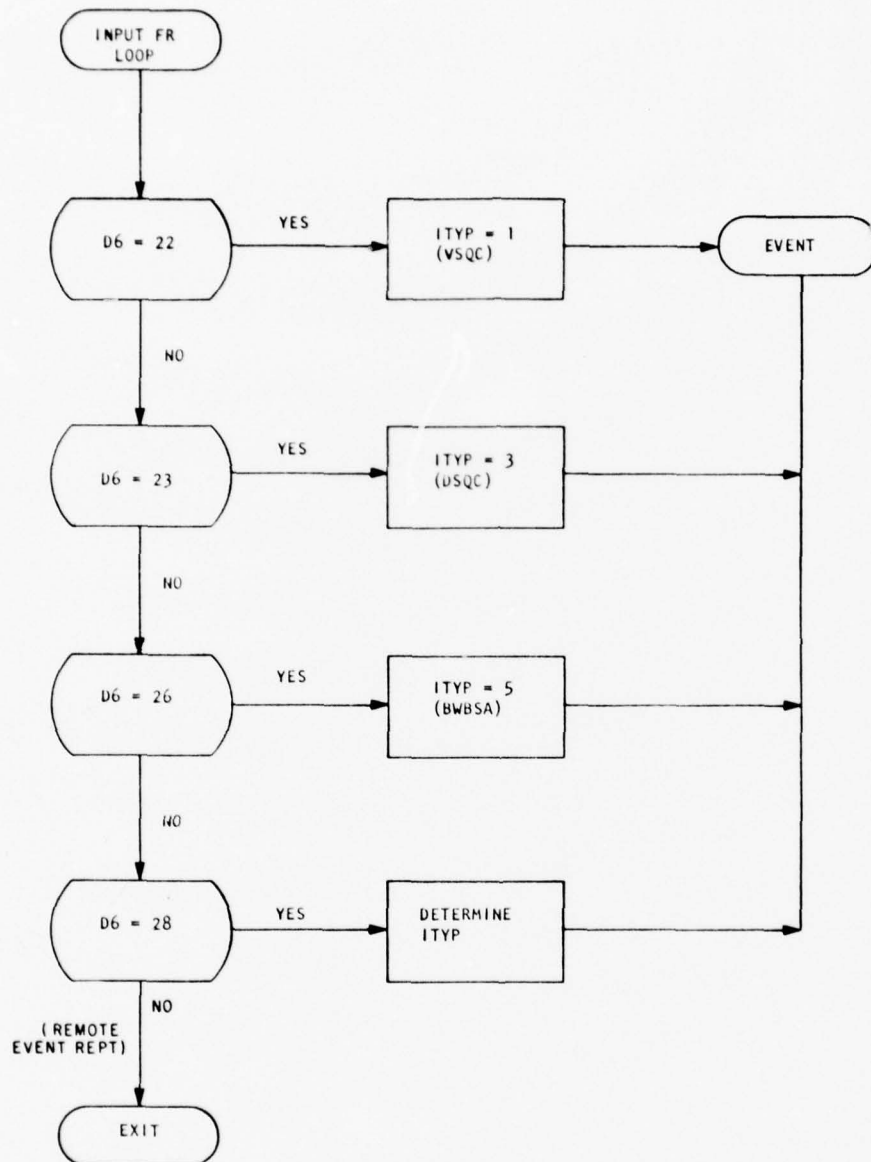
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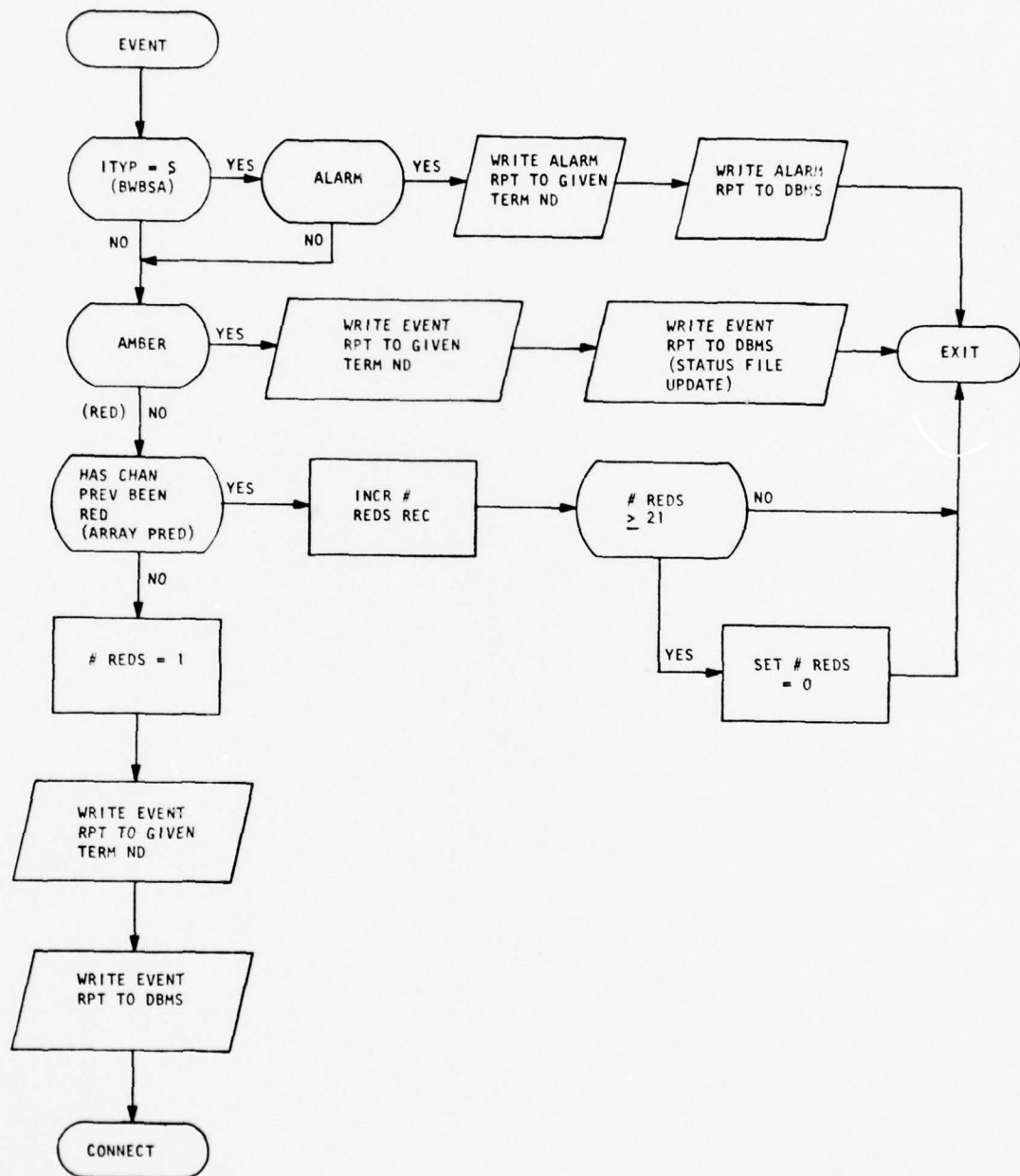
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FIAC:

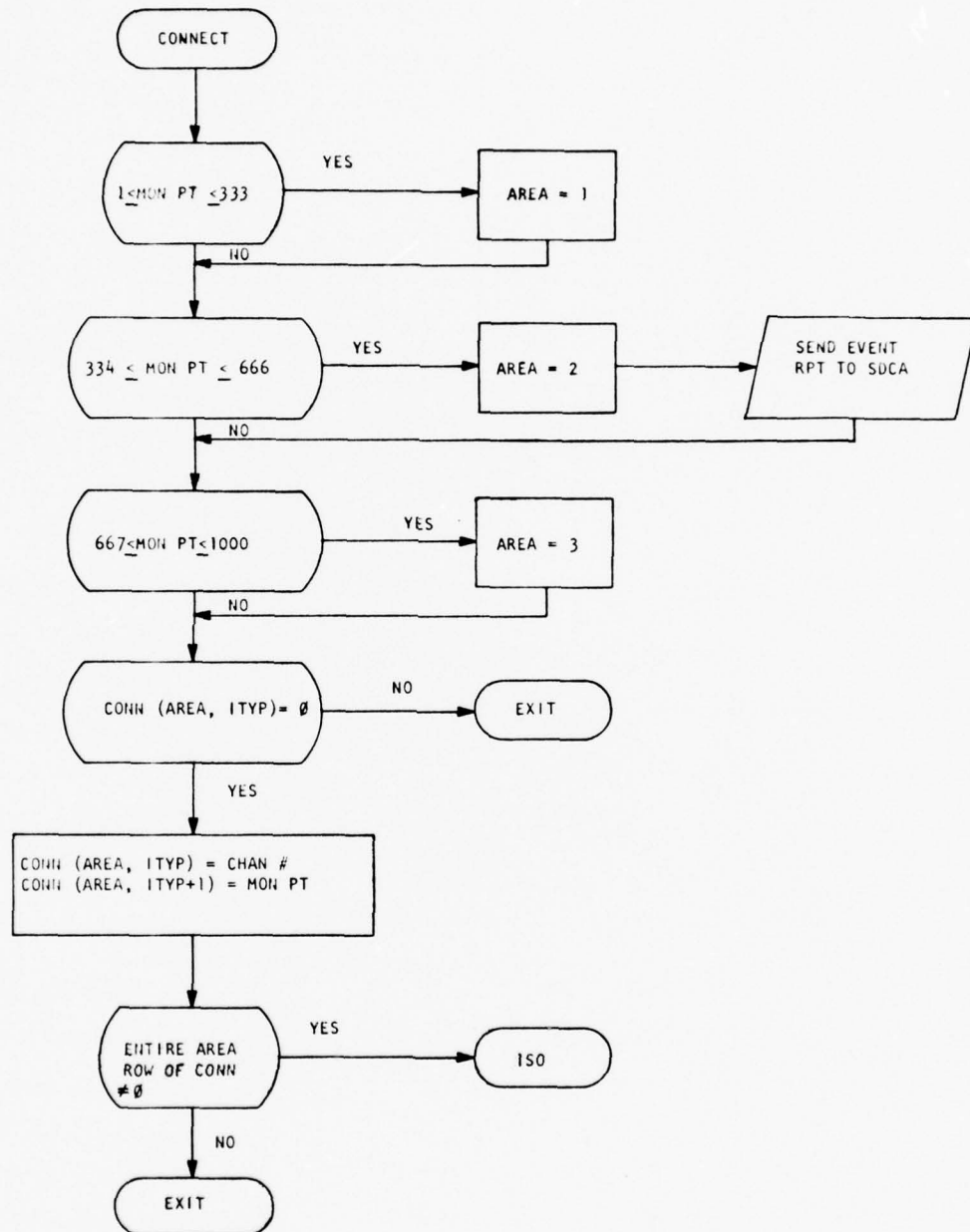


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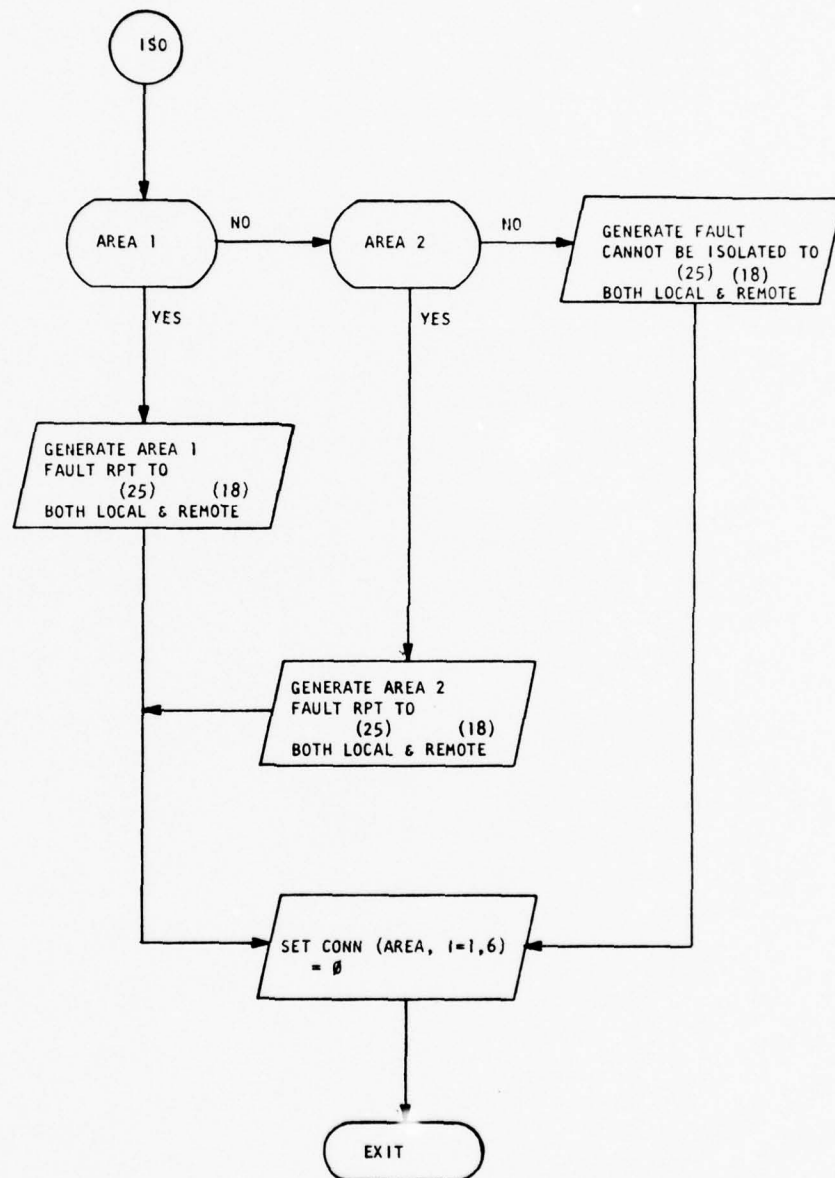


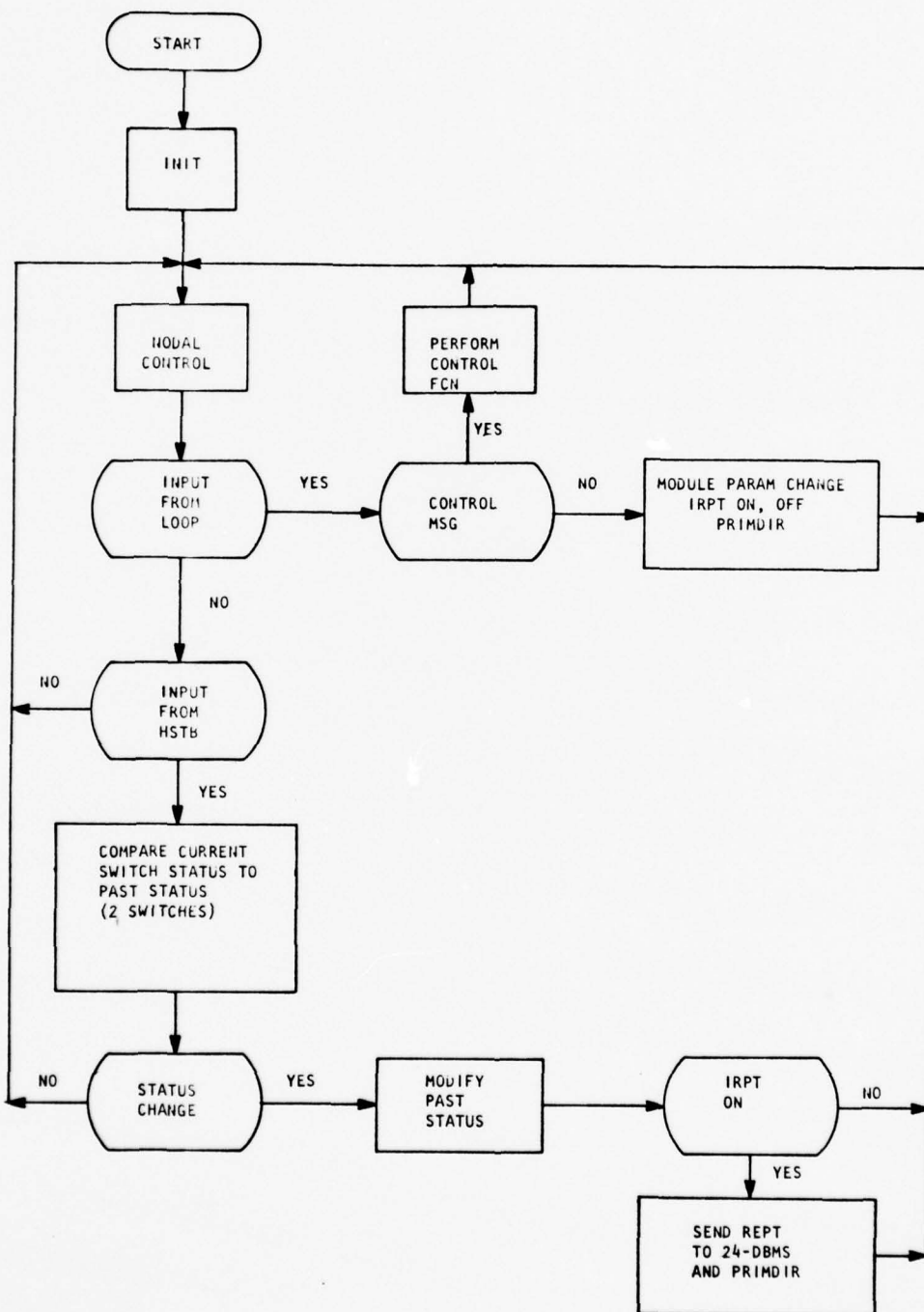


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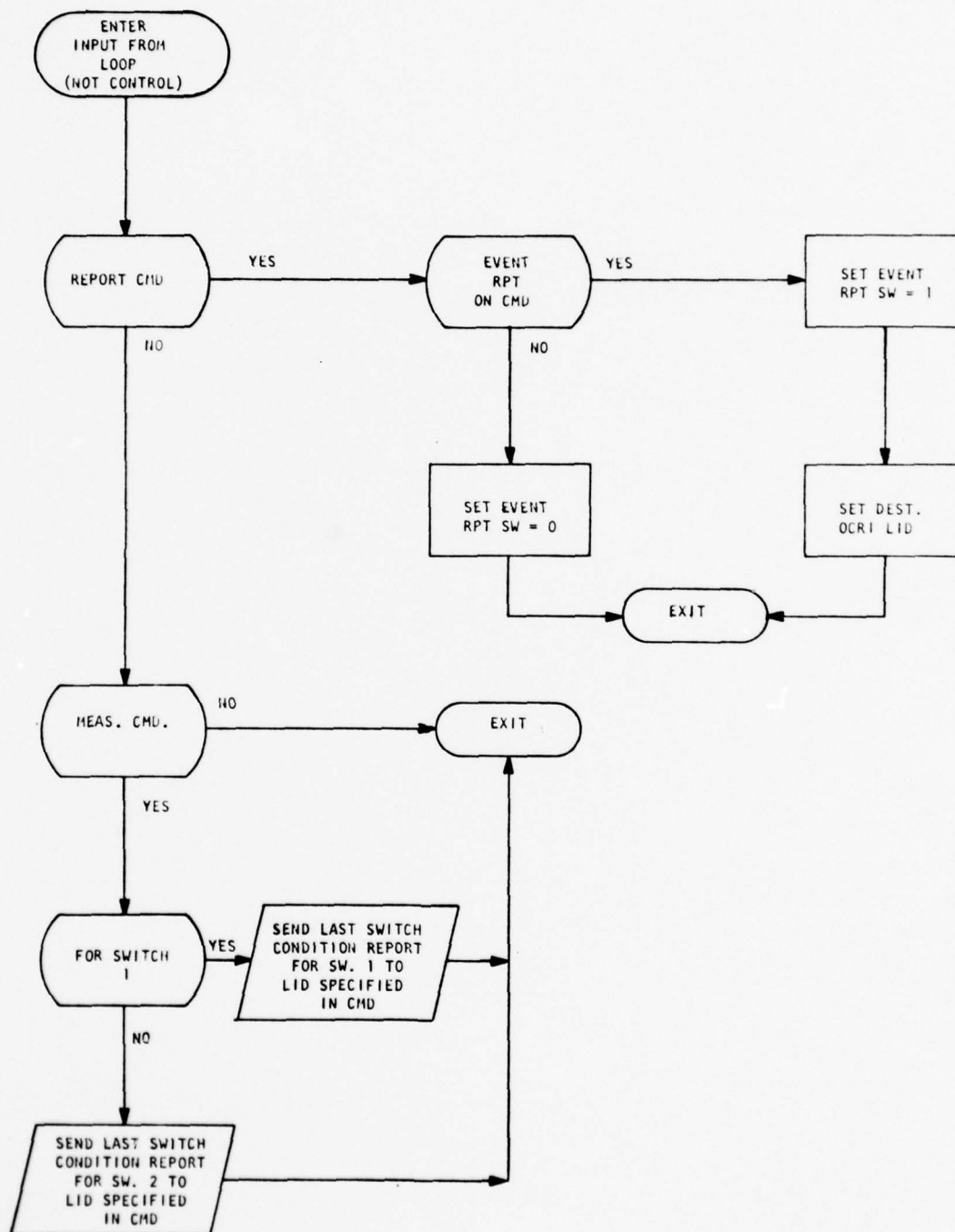


FIAC

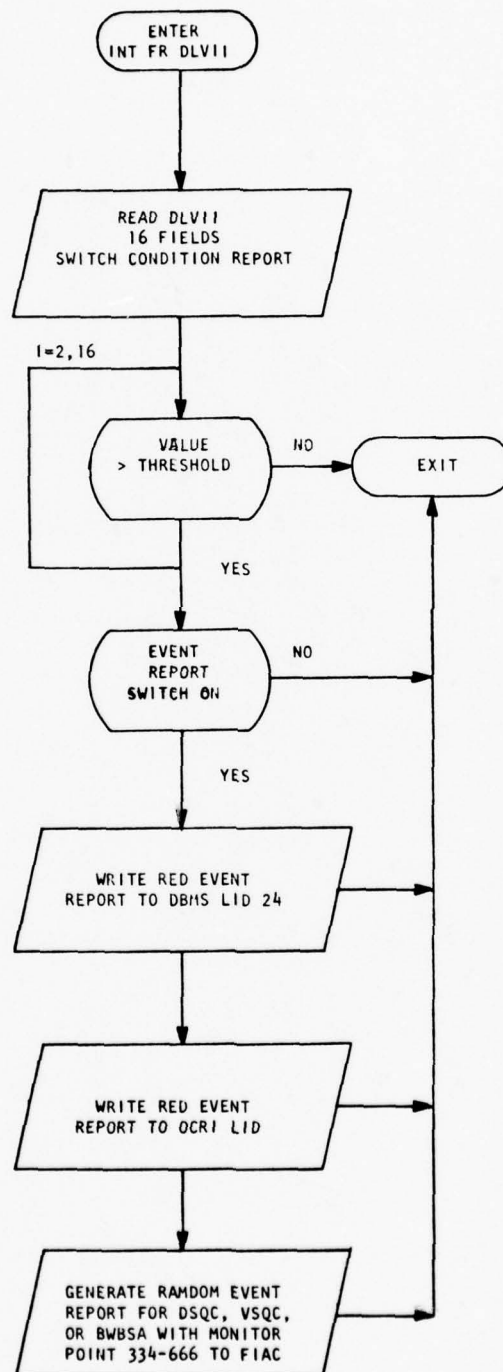




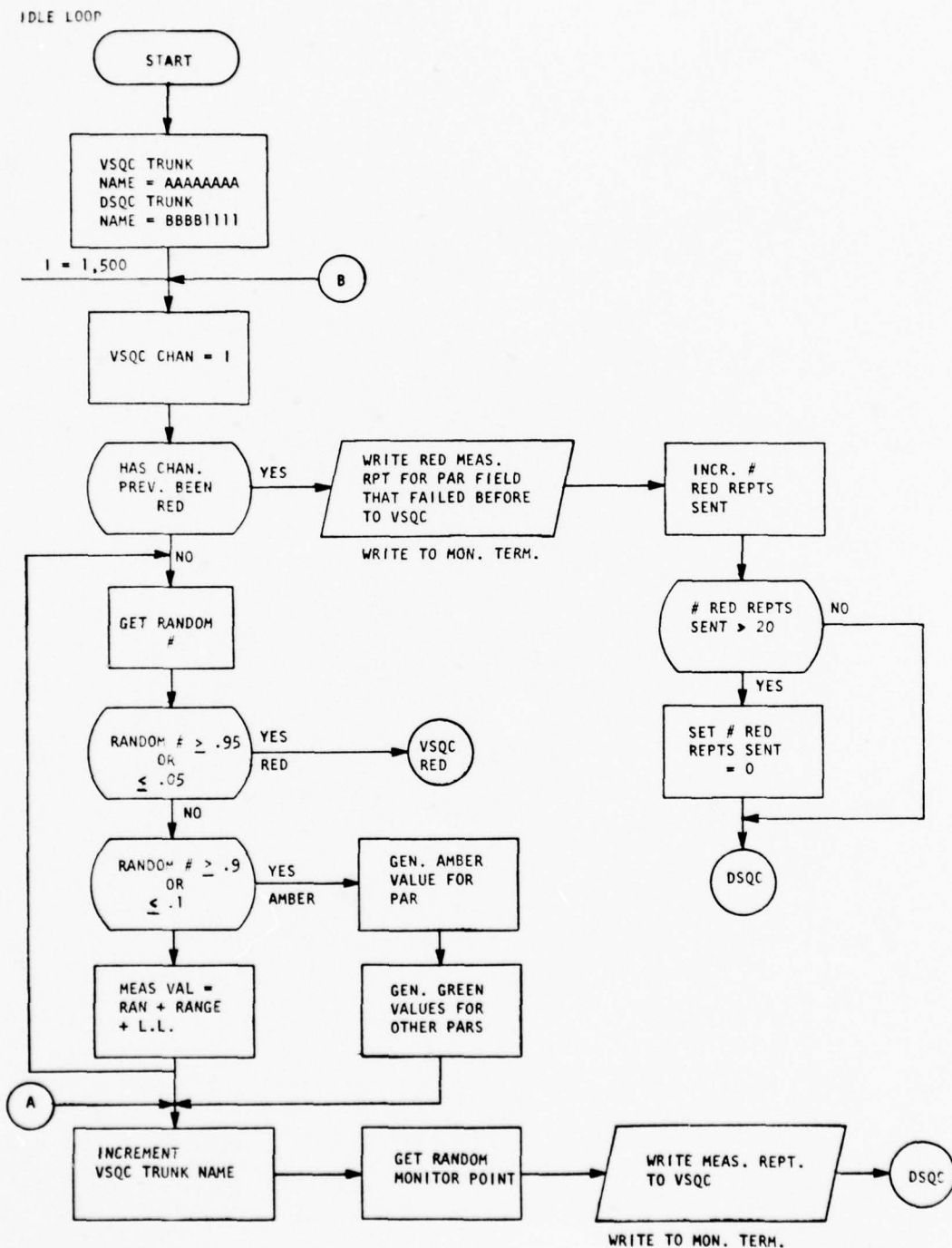
SDCA



SDCA:



SIG:





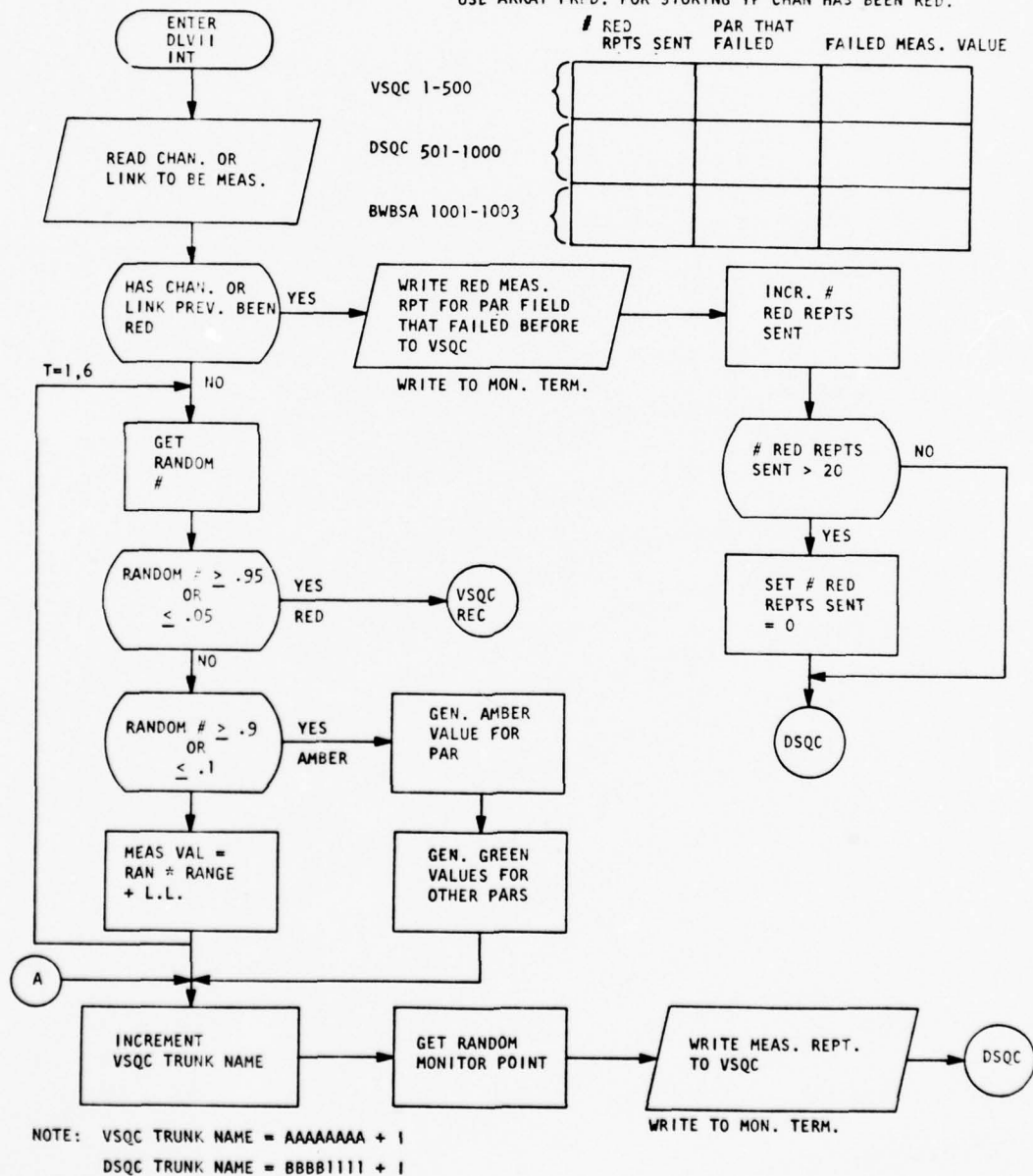
SIG:

DVLII INT FROM VSQC, DSQC, OR BWBSA  
(3 DIFF HANDLERS)

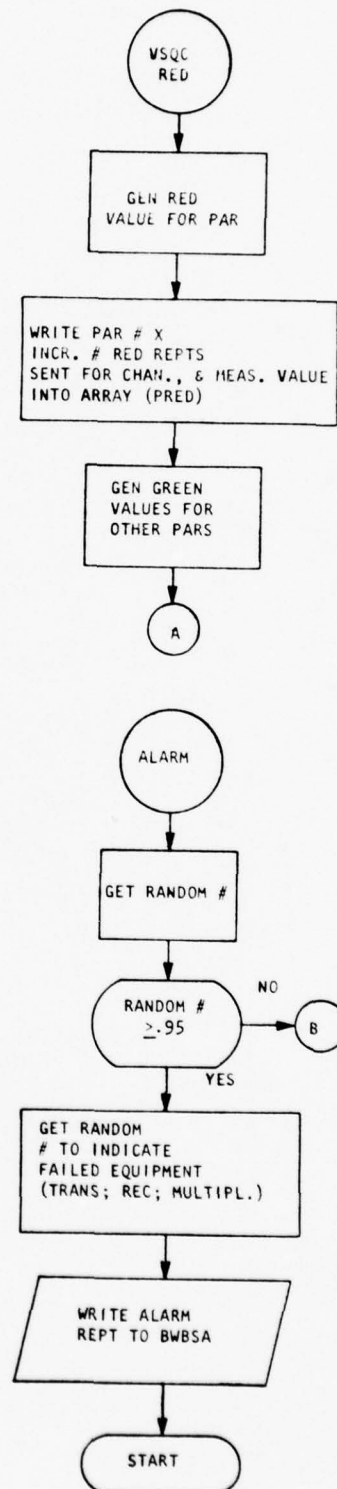
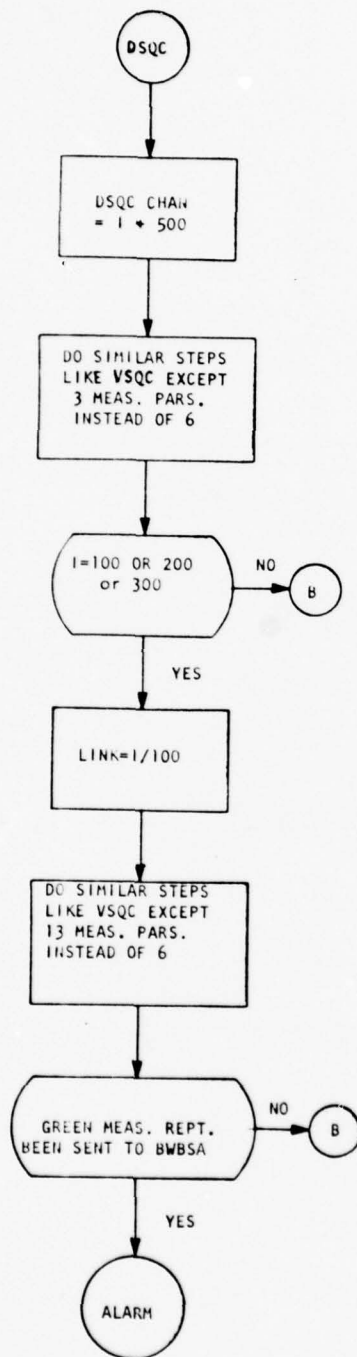
SIG: INPUTS: FROM 3 INDEPENDENT DVLII'S CONNECTED TO  
VSQC, DSQC, AND BWBSA. VALUE READ WILL  
BE A CHANNEL OR LINK # TO BE MEASURED.

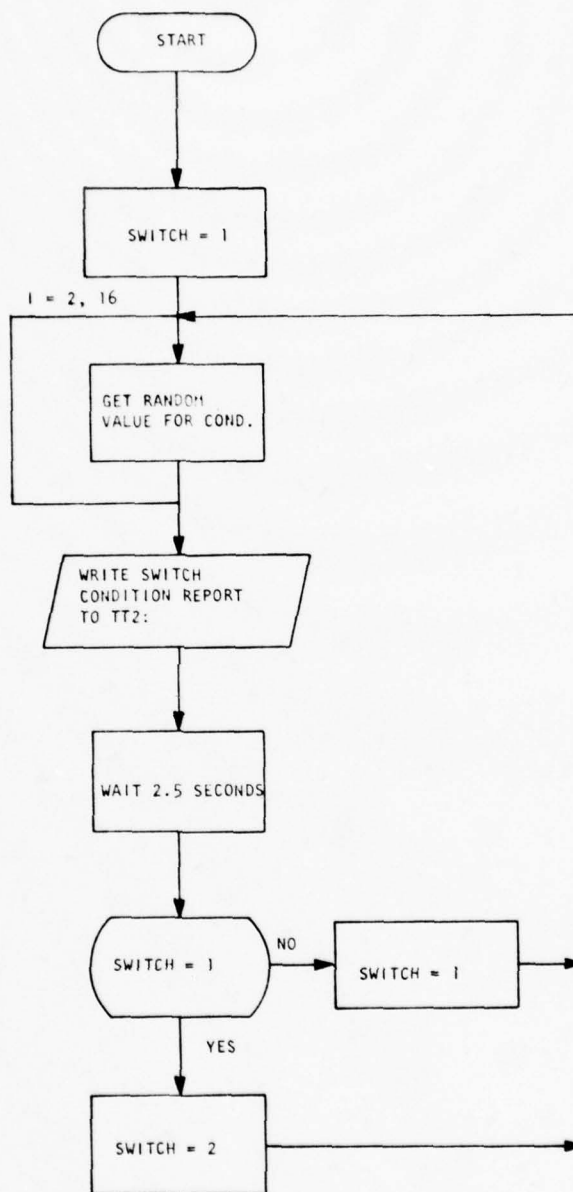
OUTPUTS: MEAS. REPTS. TO VSQC, DSQC, AND BWBSA.  
ALSO OCCASIONAL ALARM REPTS. TO BWBSA.  
ALL DATA TO MONITOR CRT TERMINAL.

USE ARRAY PRFD. FOR STORING IF CHAN HAS BEEN RED.

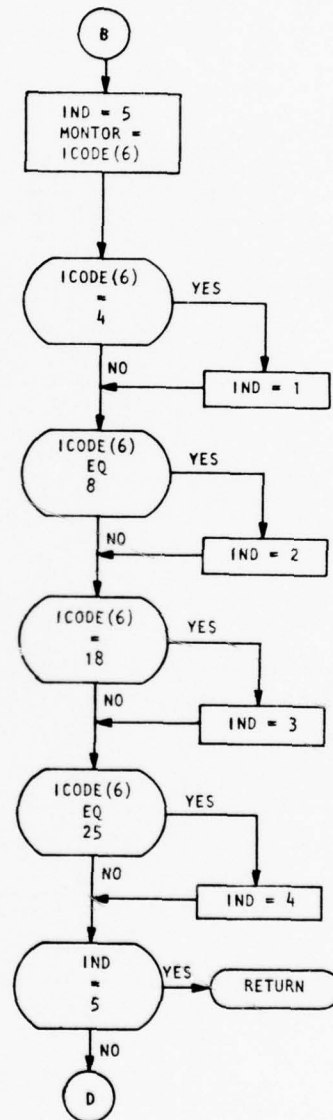
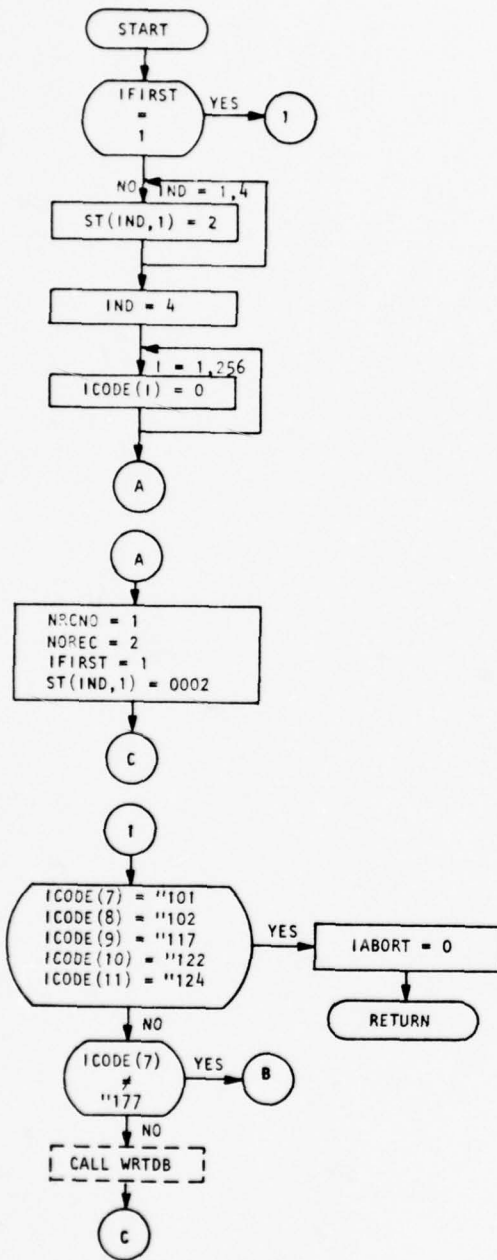


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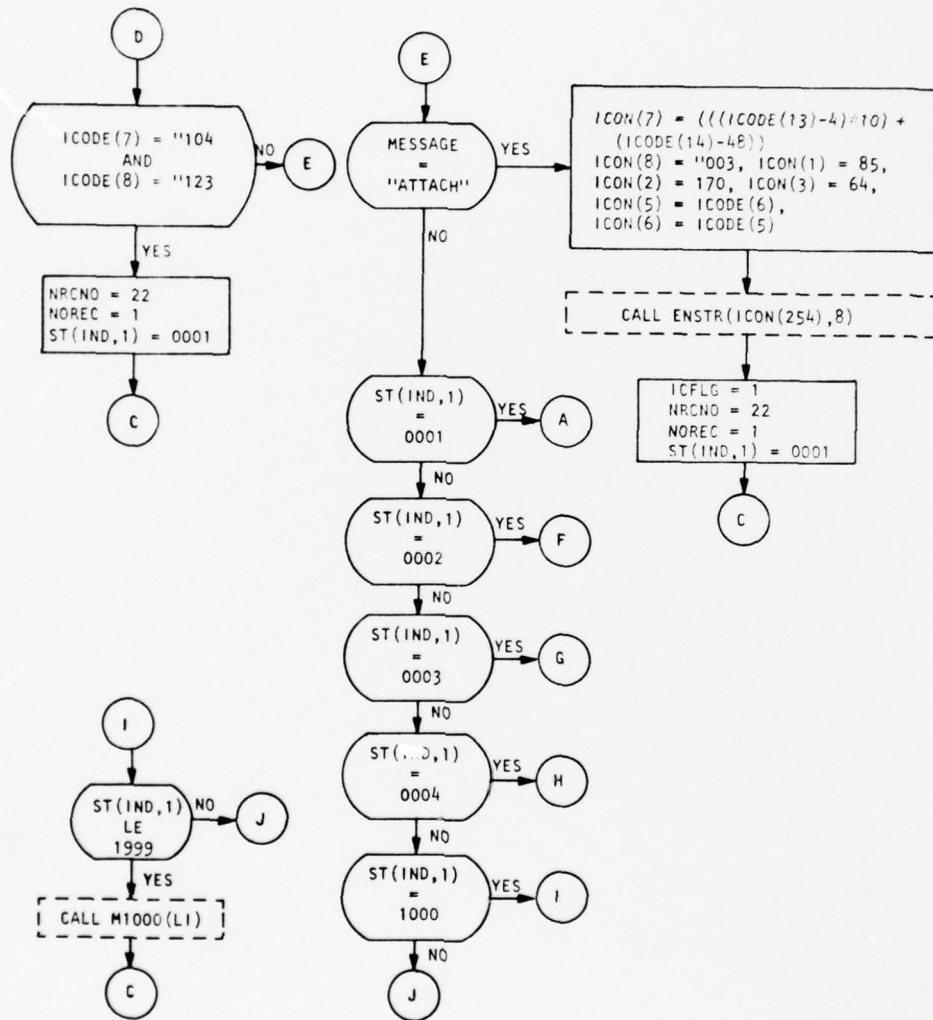




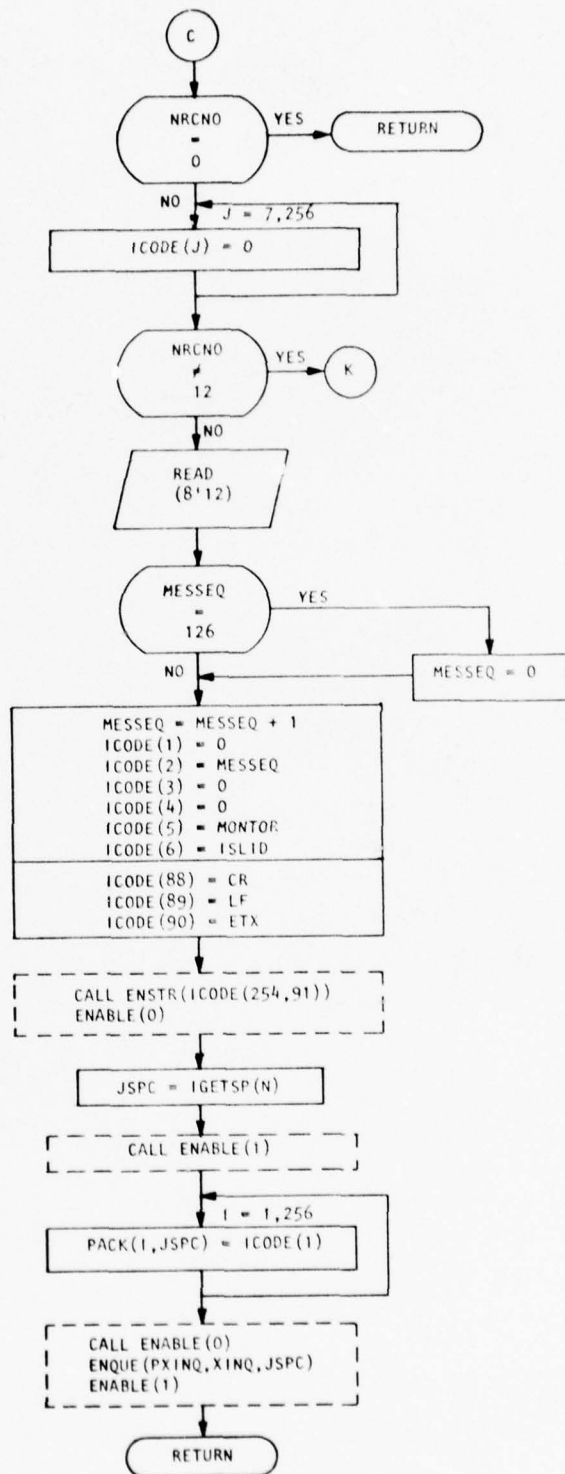
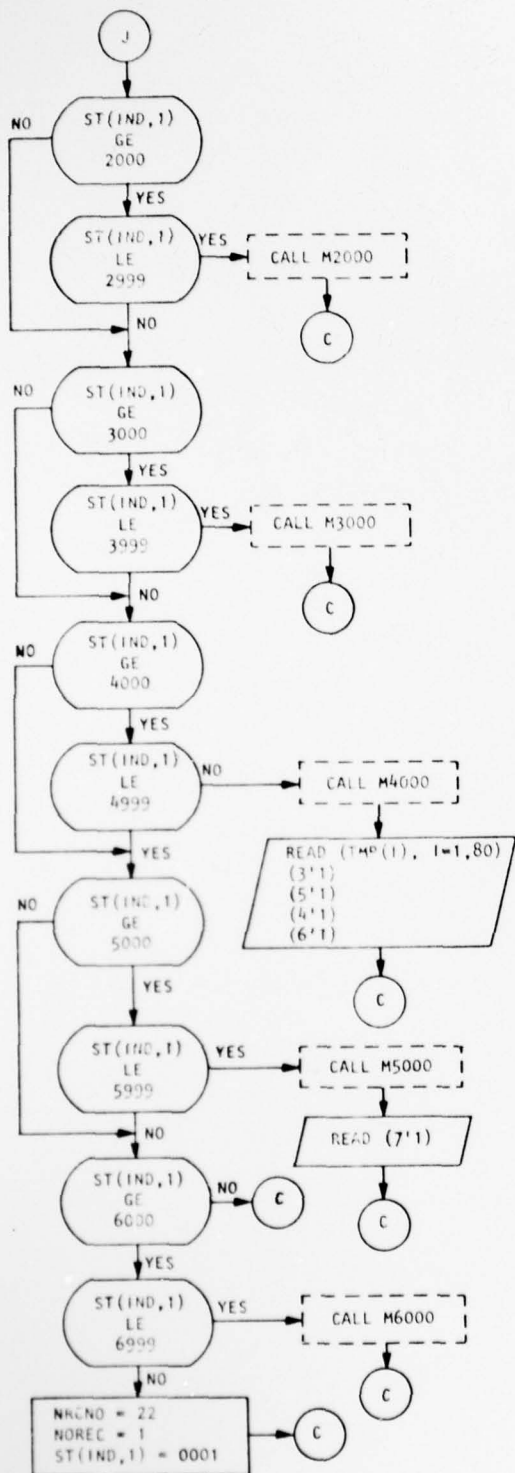
USRLNG:



USRLNG:

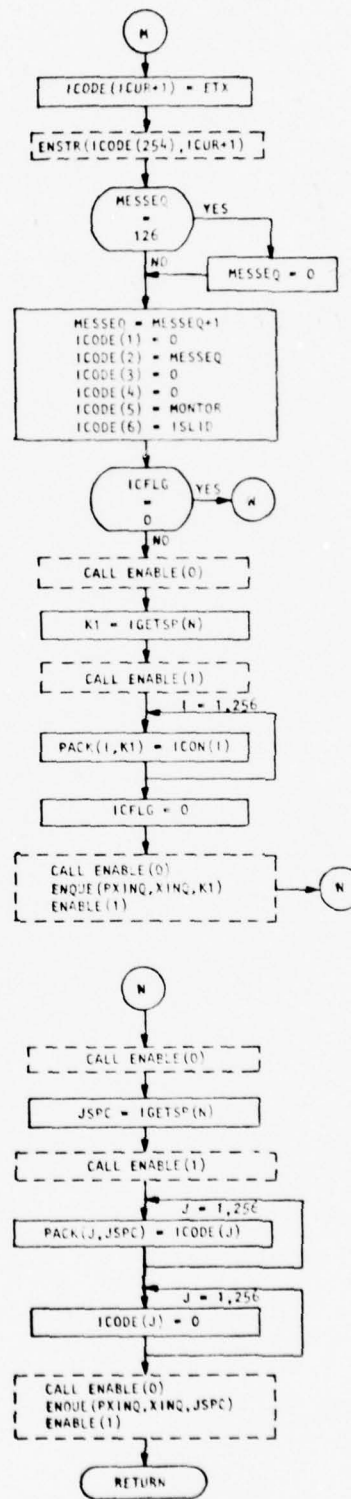
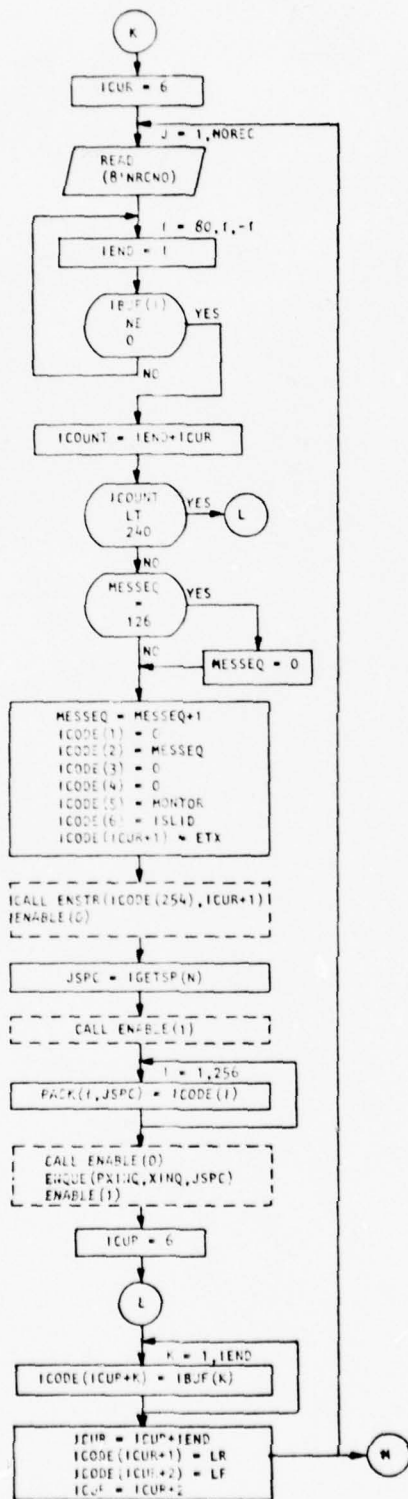


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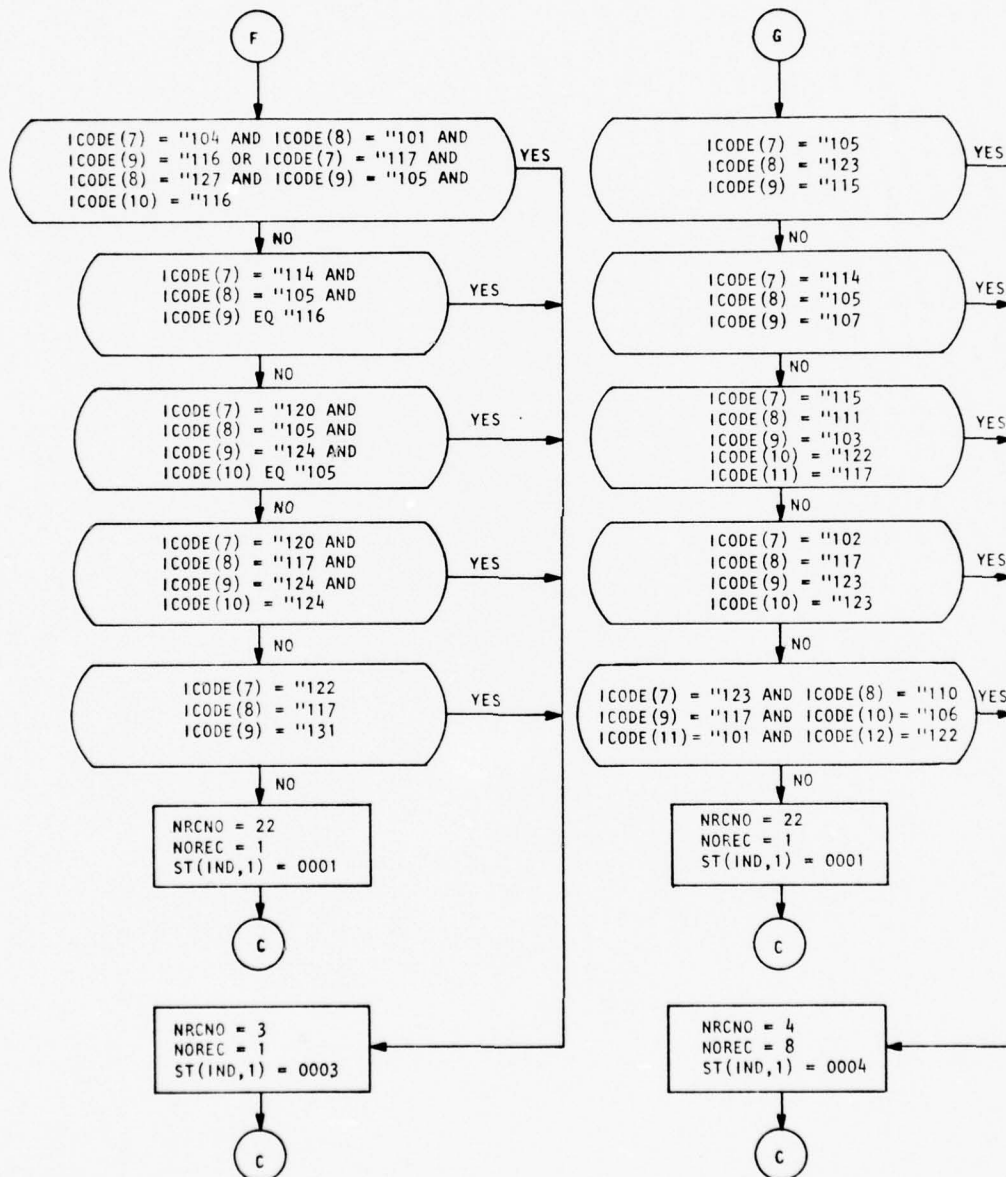




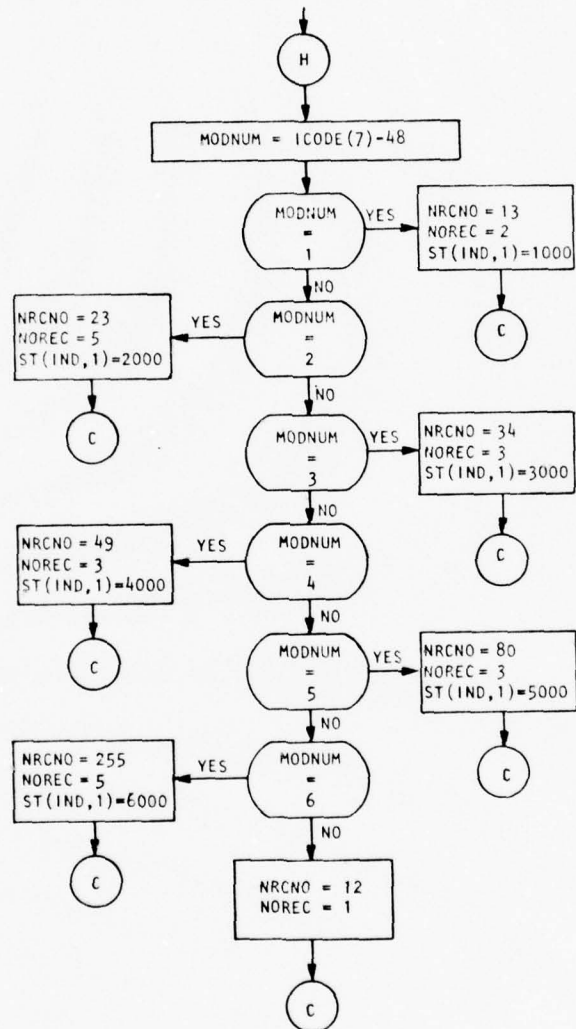
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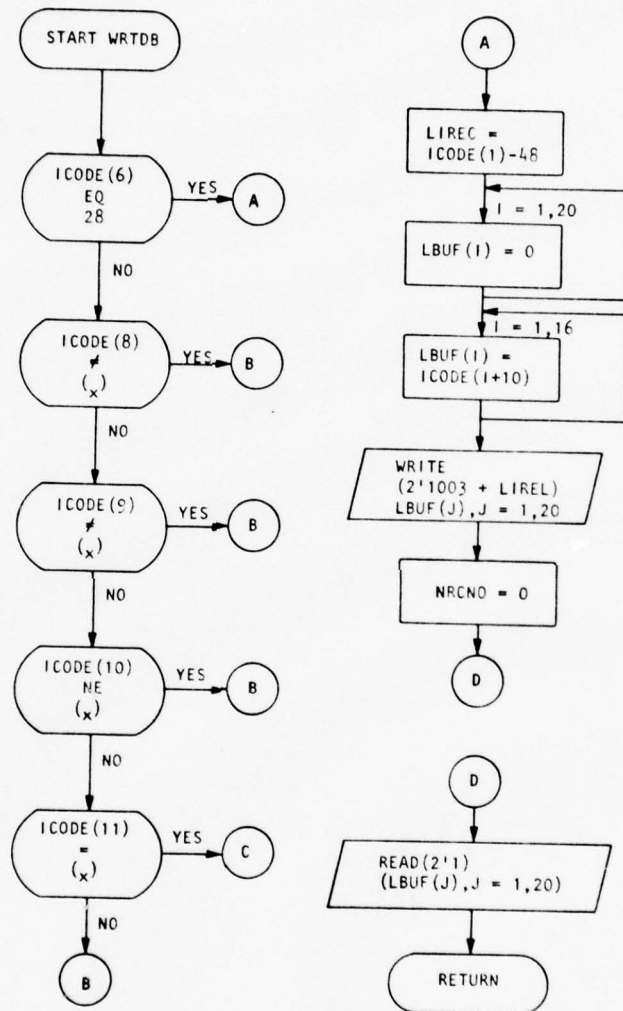
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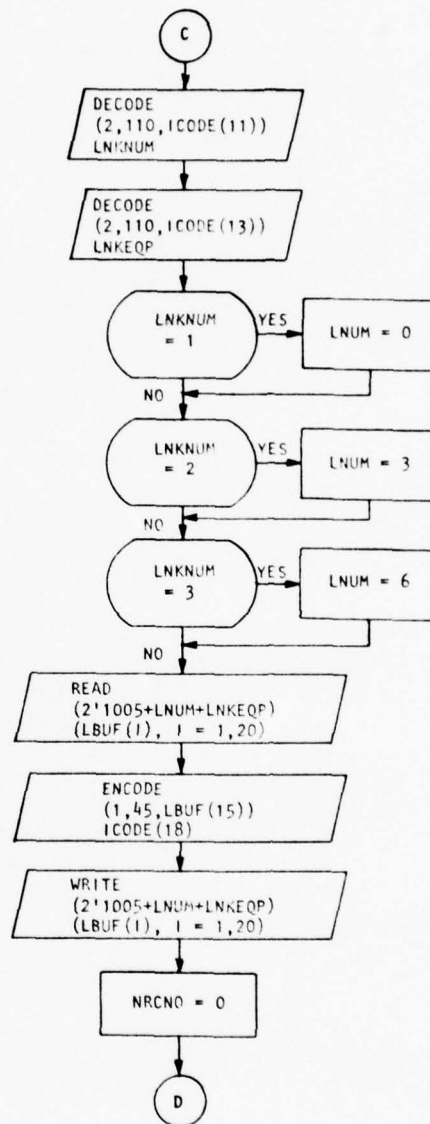
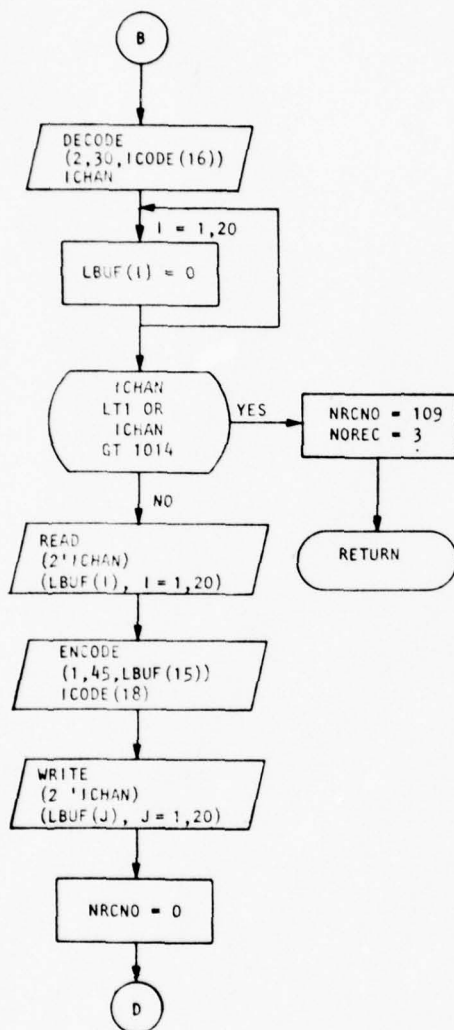
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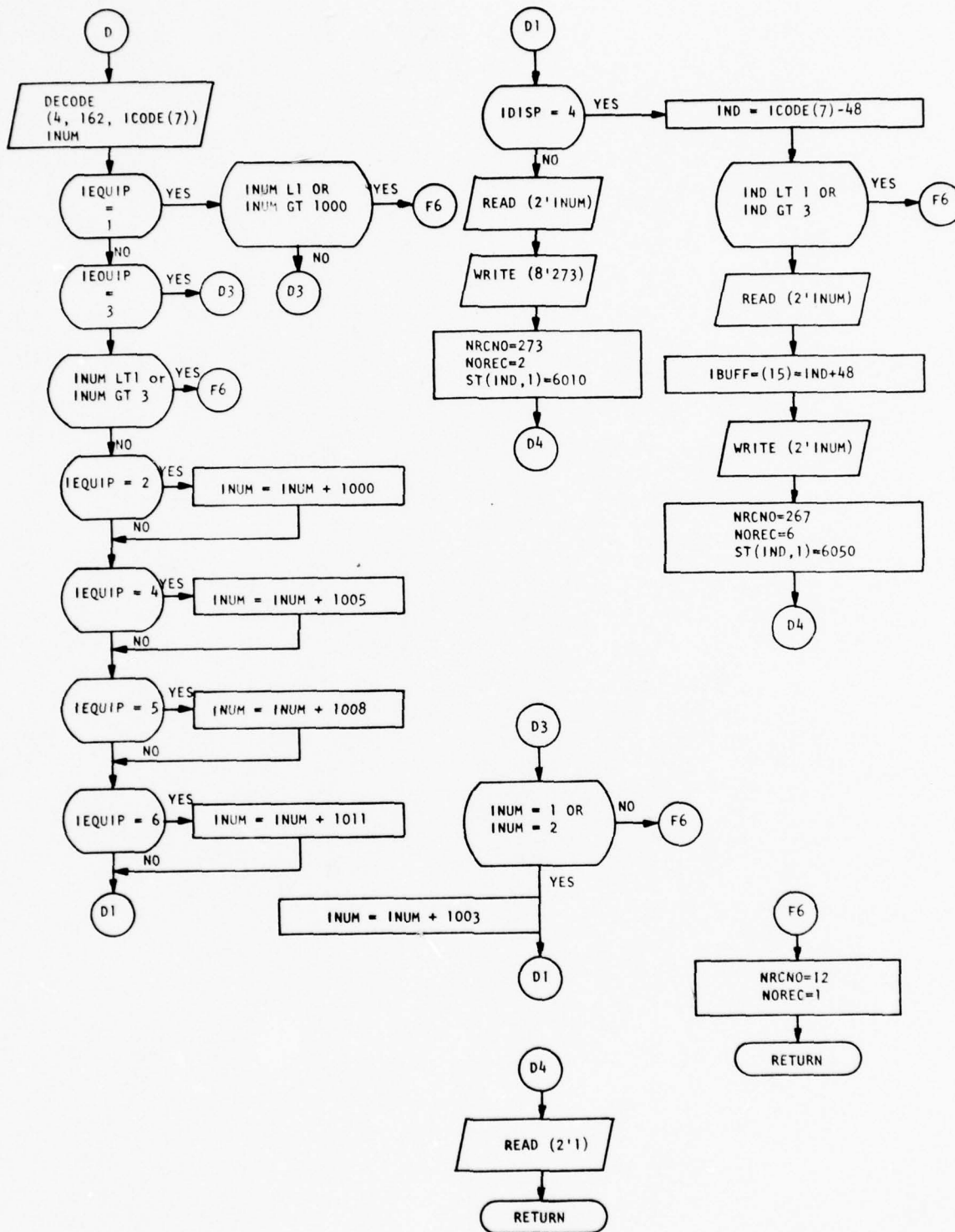
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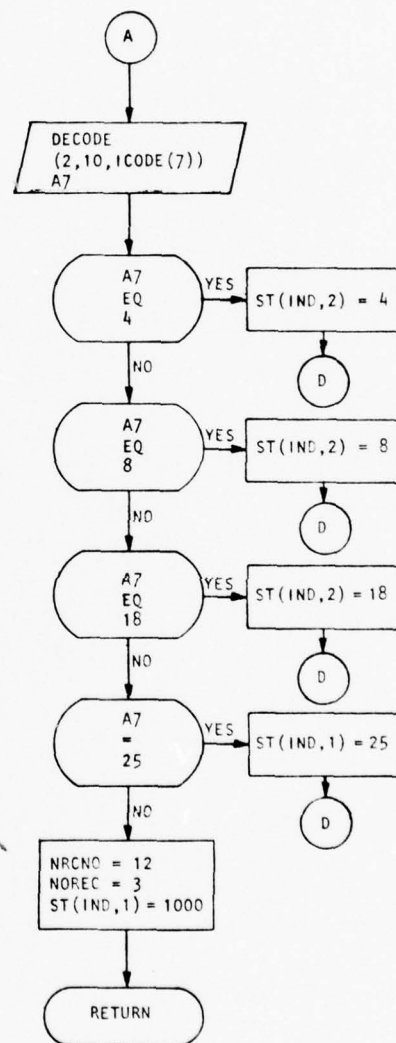
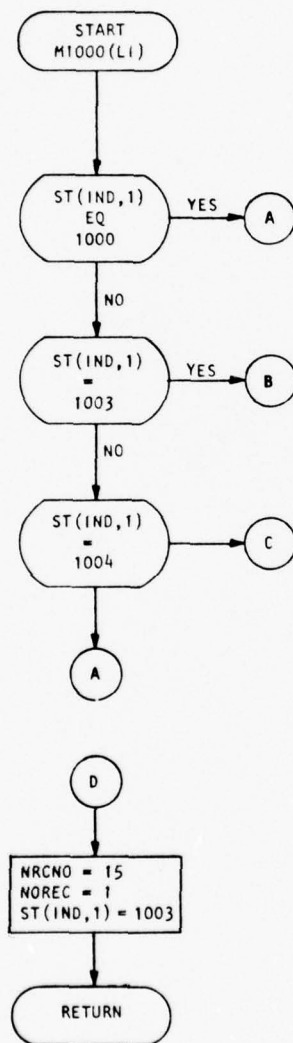


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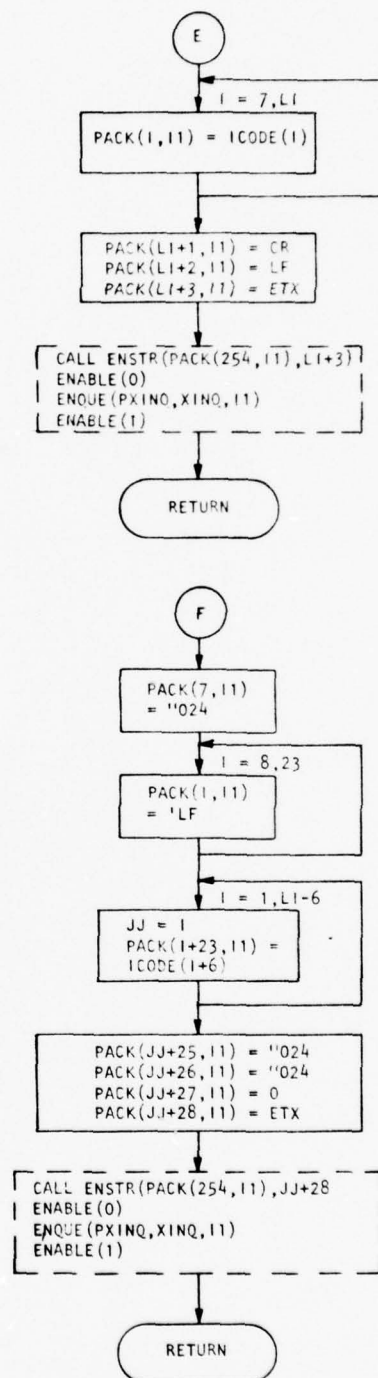
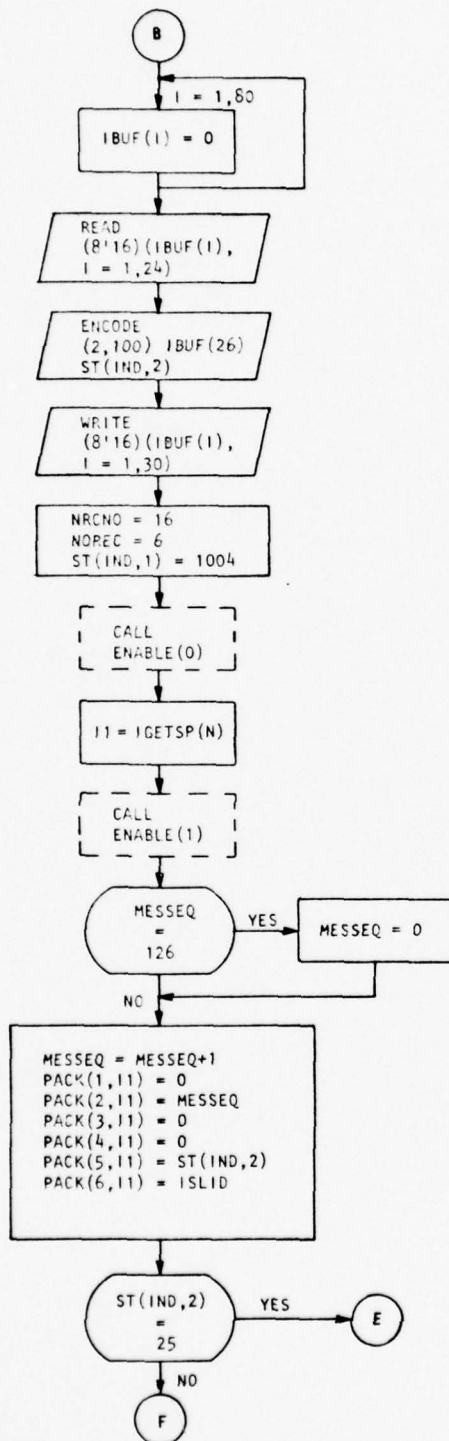




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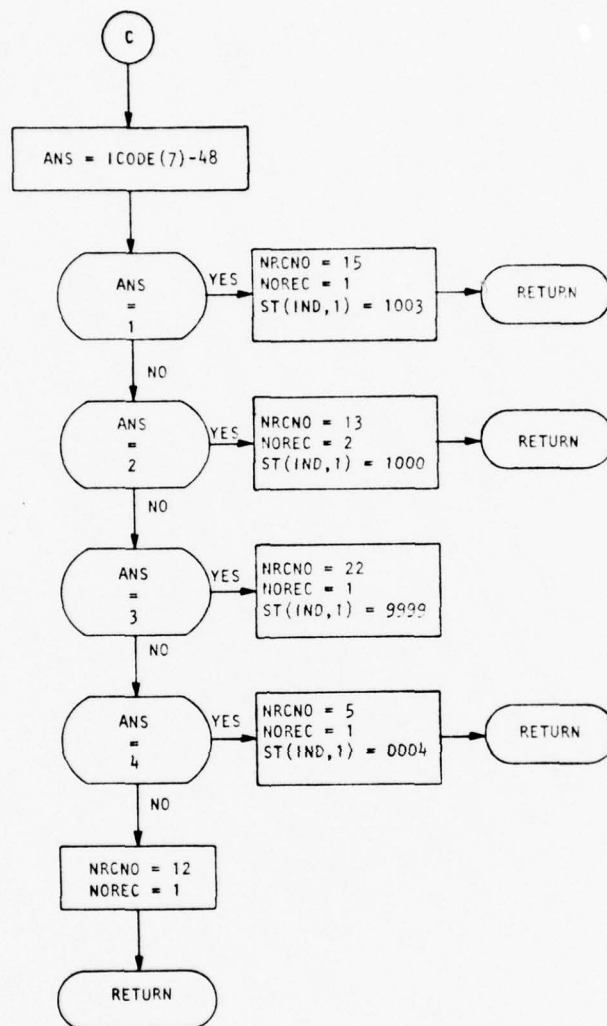


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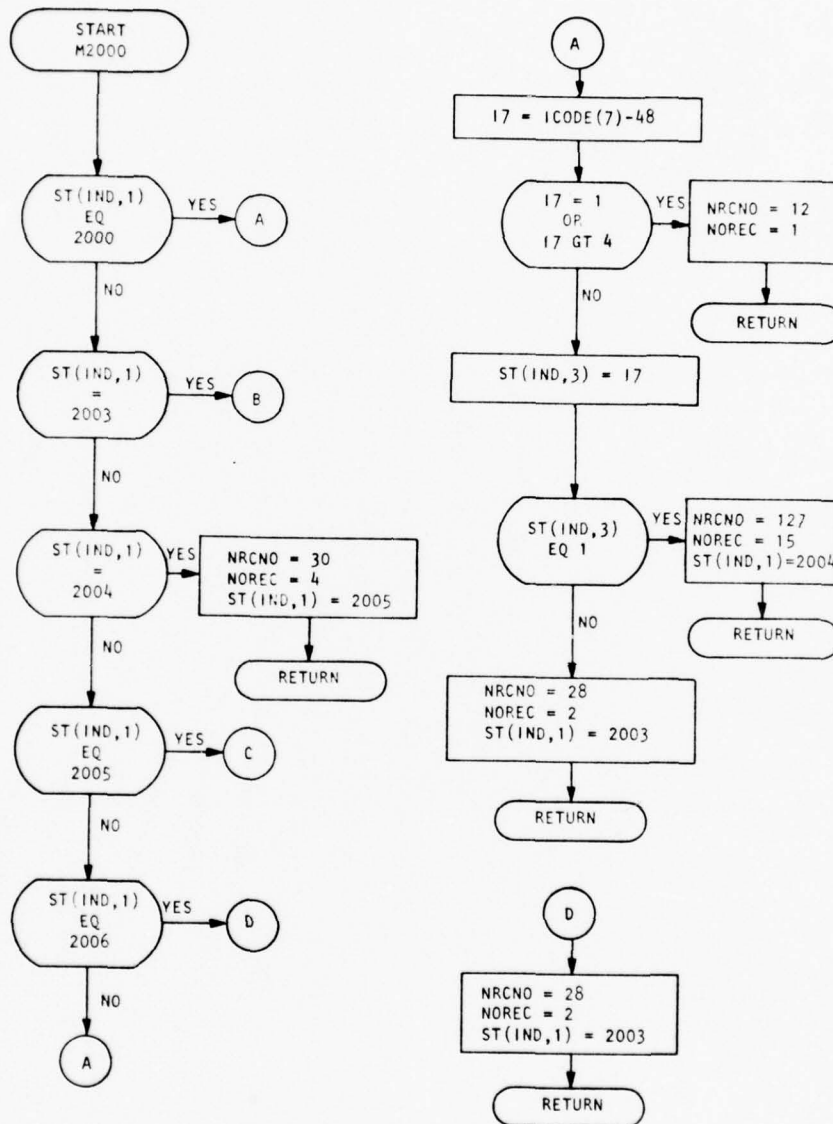
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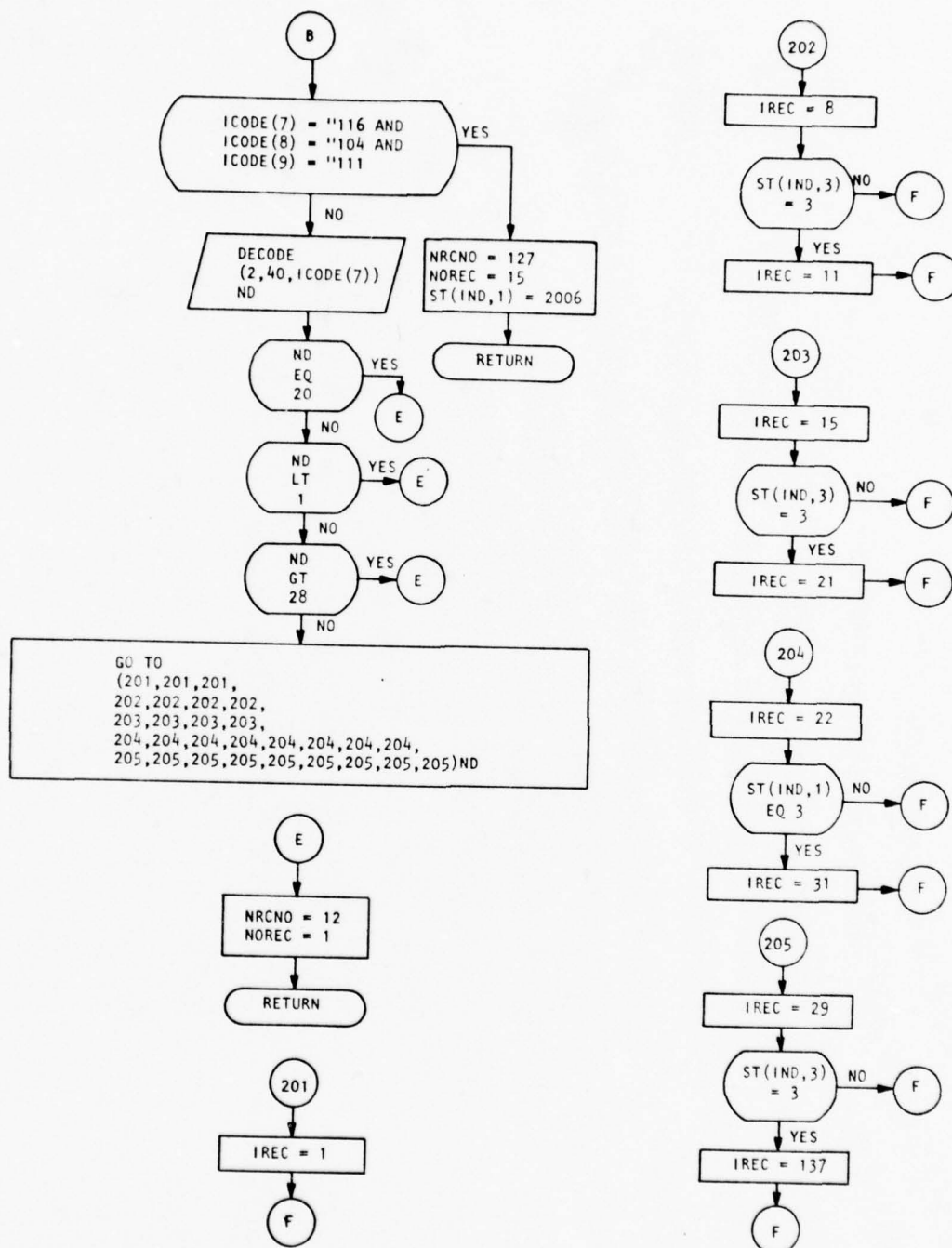
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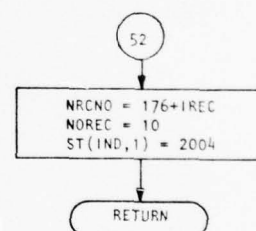
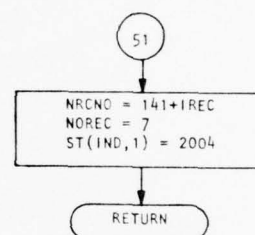
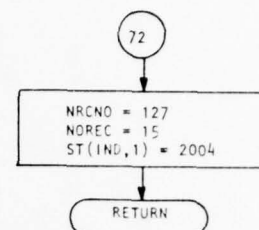
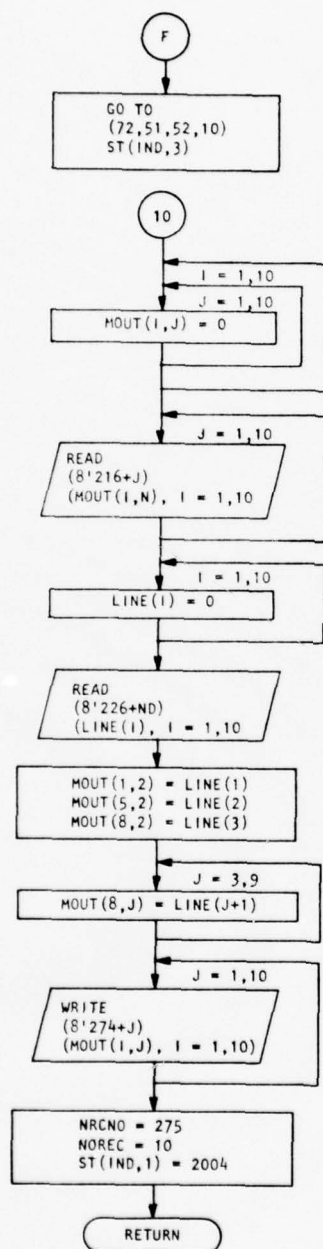
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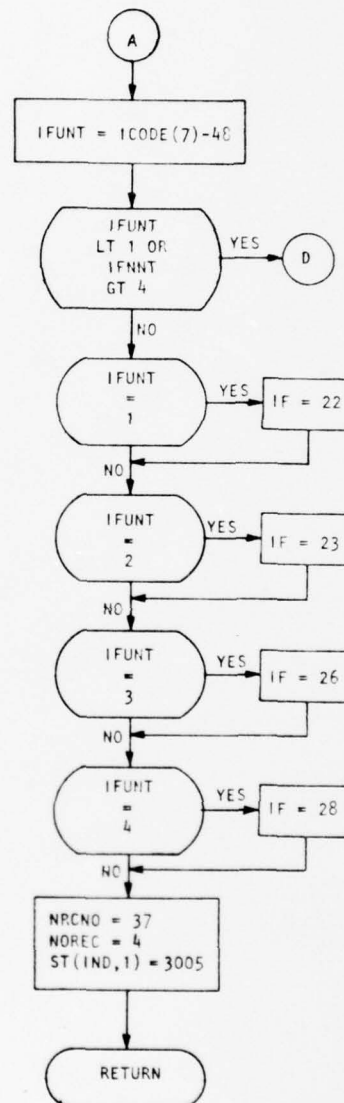
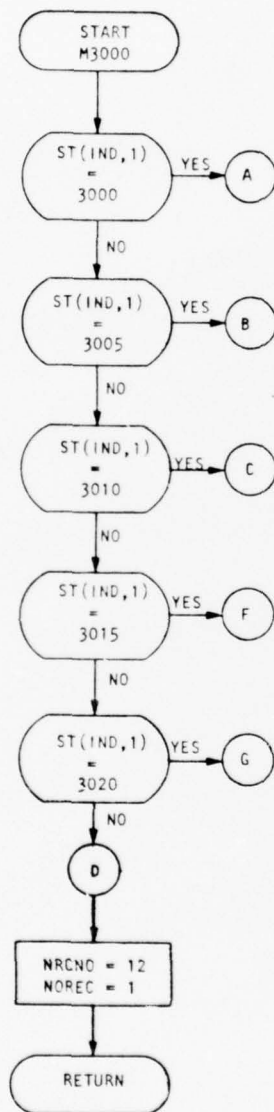
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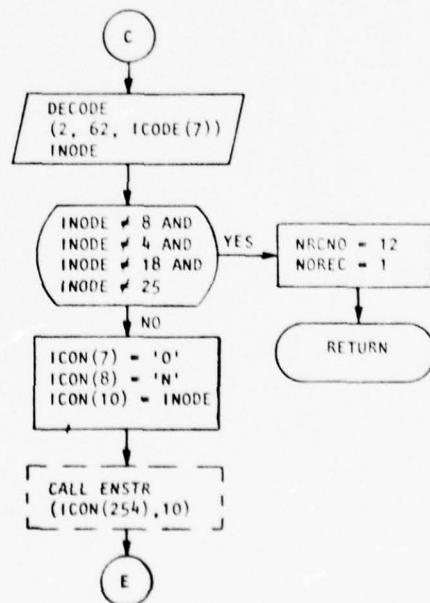
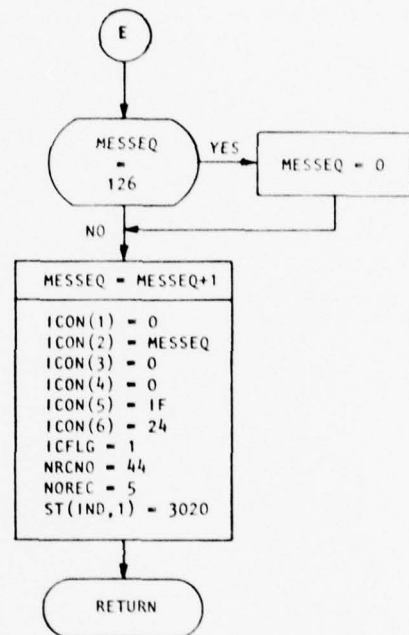
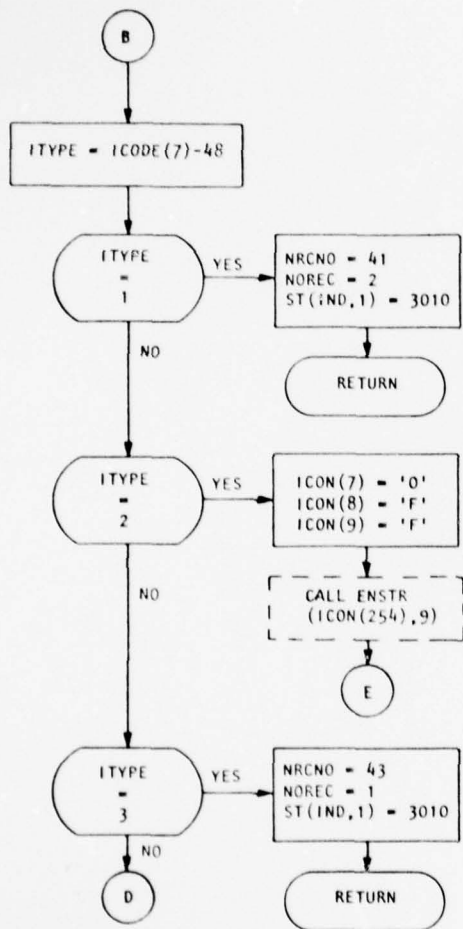


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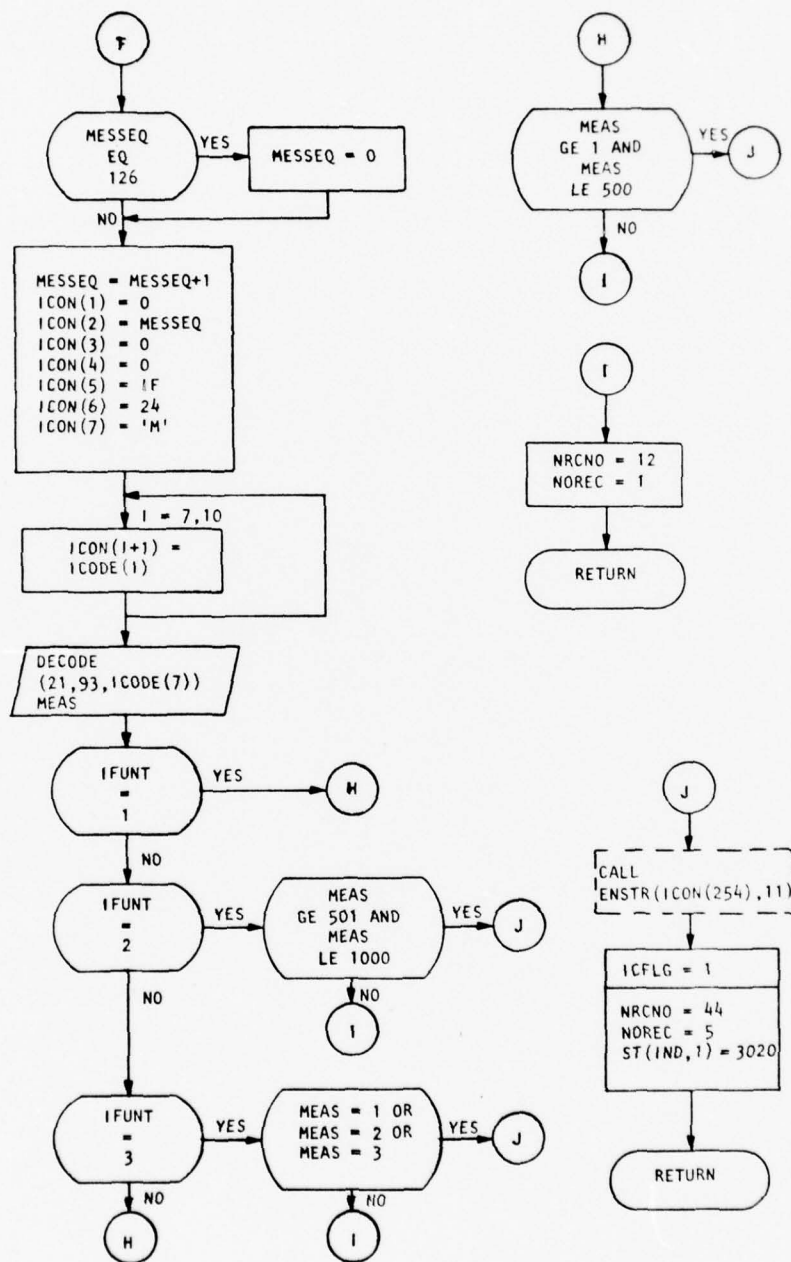




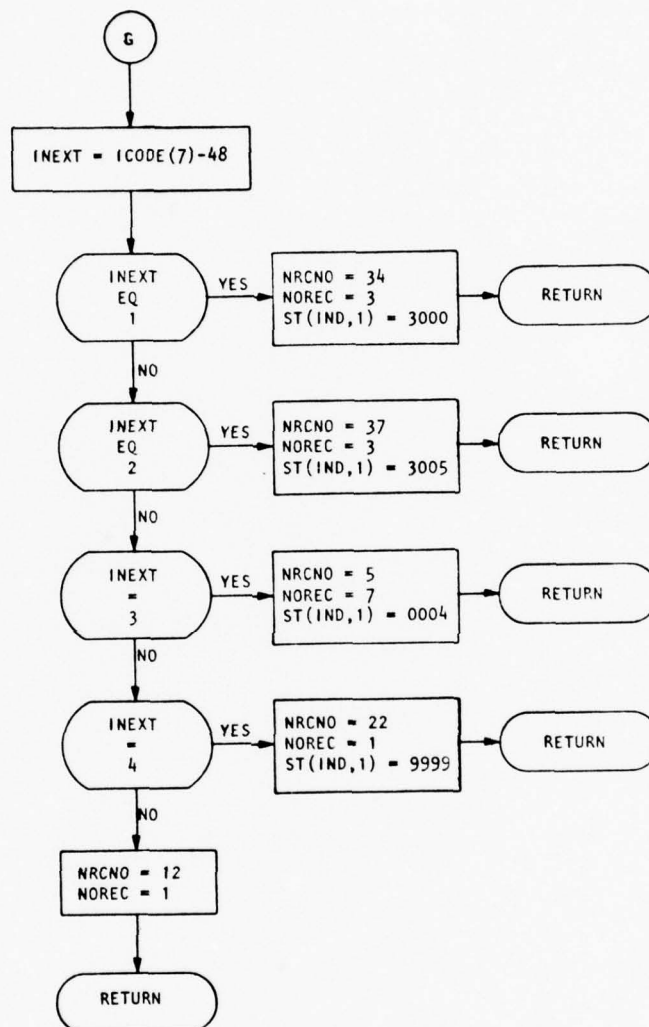
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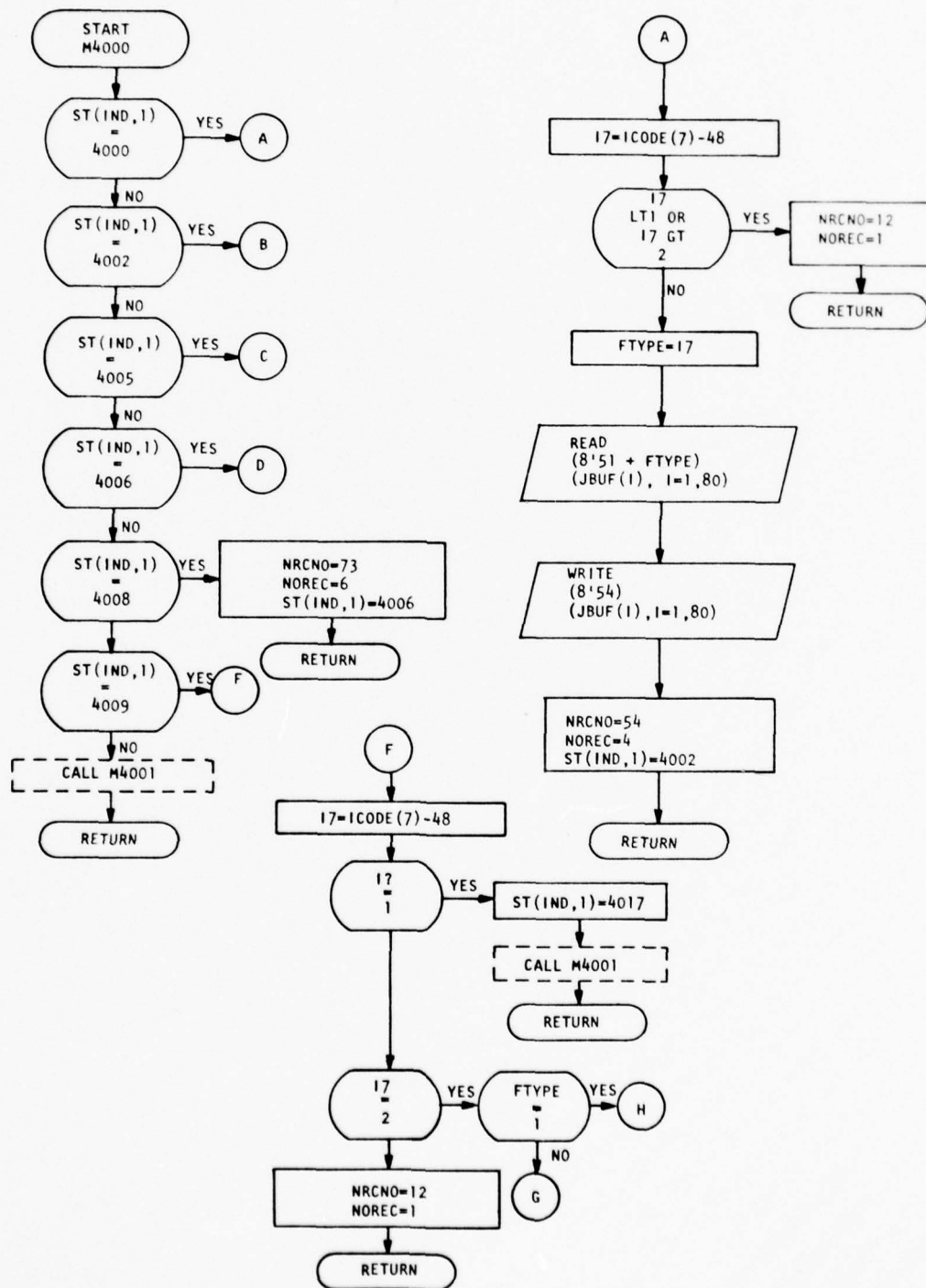
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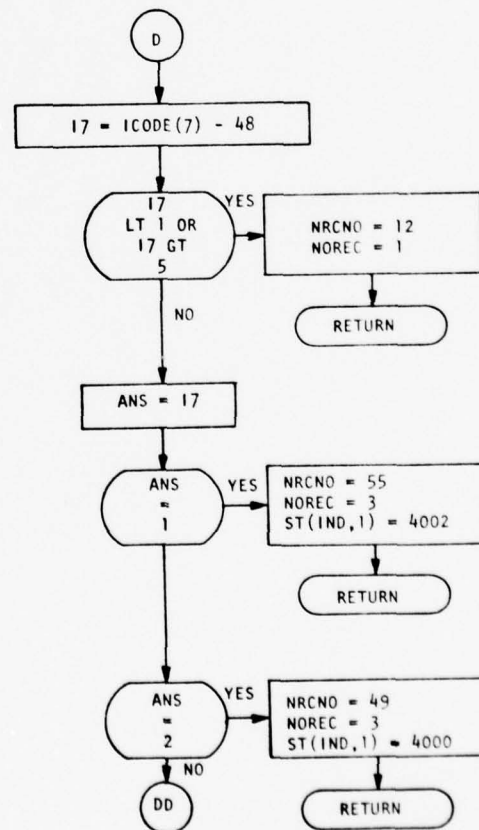
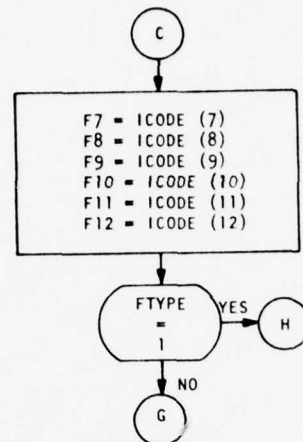
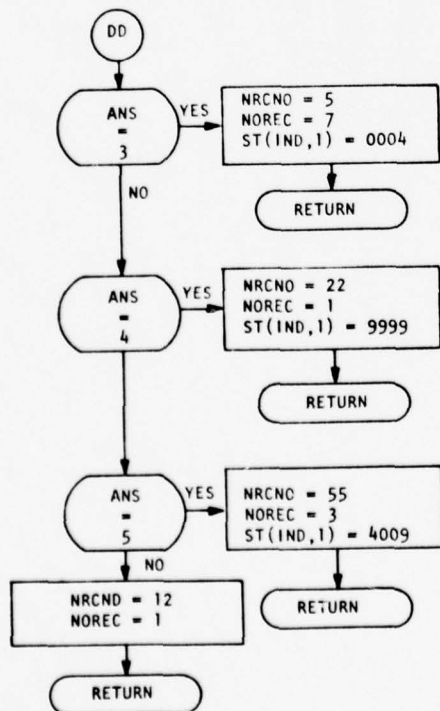
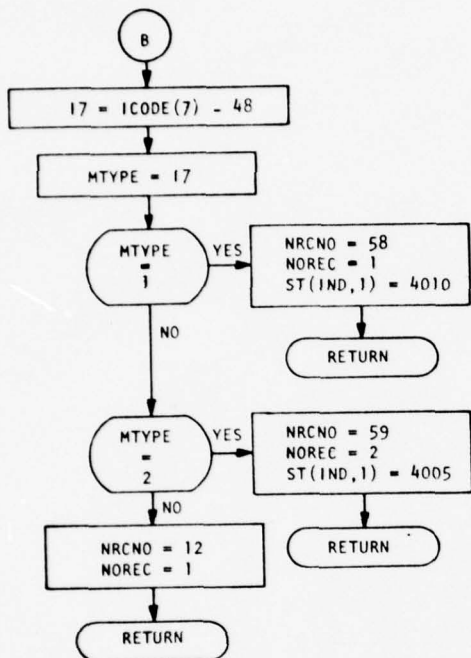
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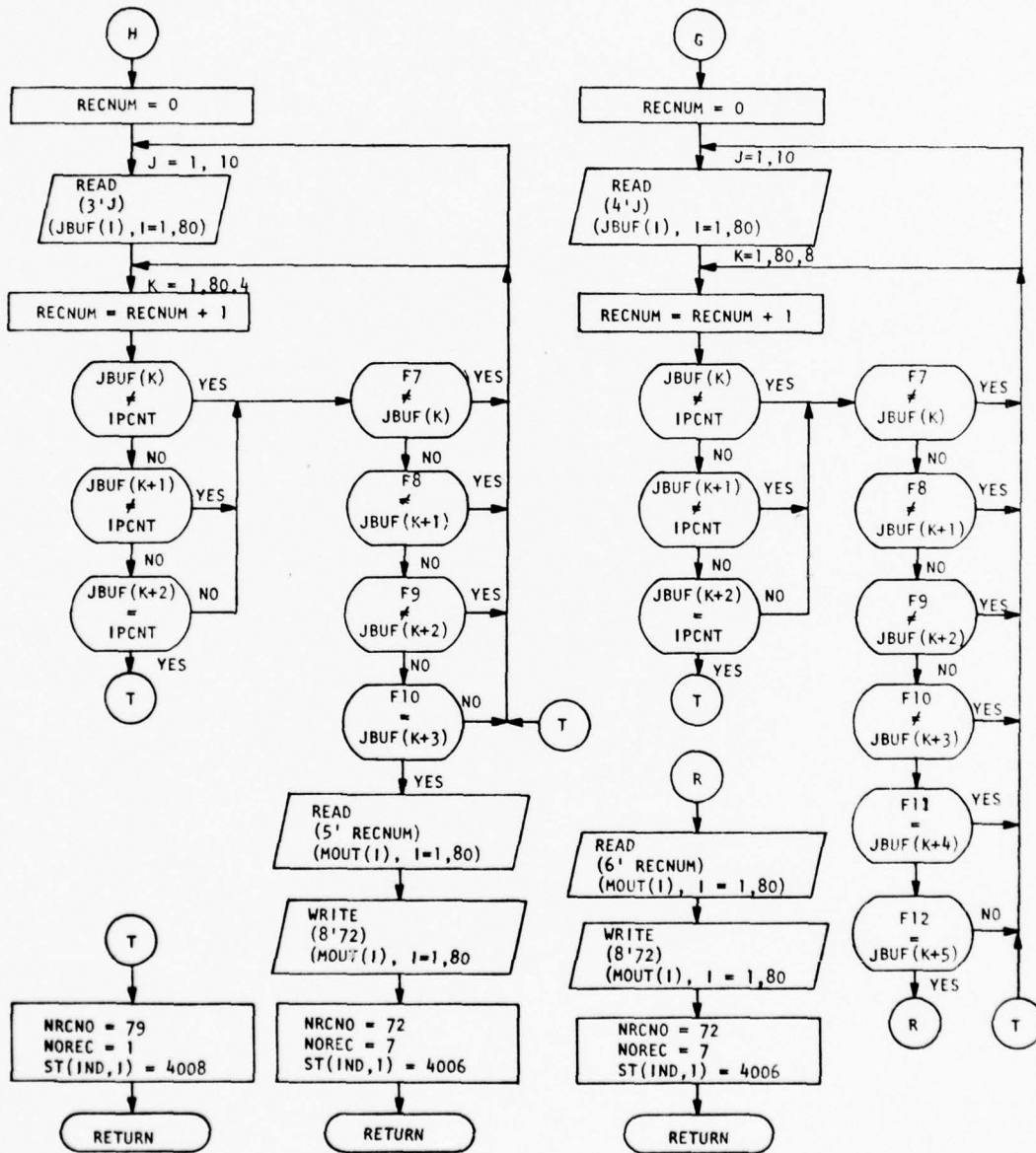
M4000:



M4000:

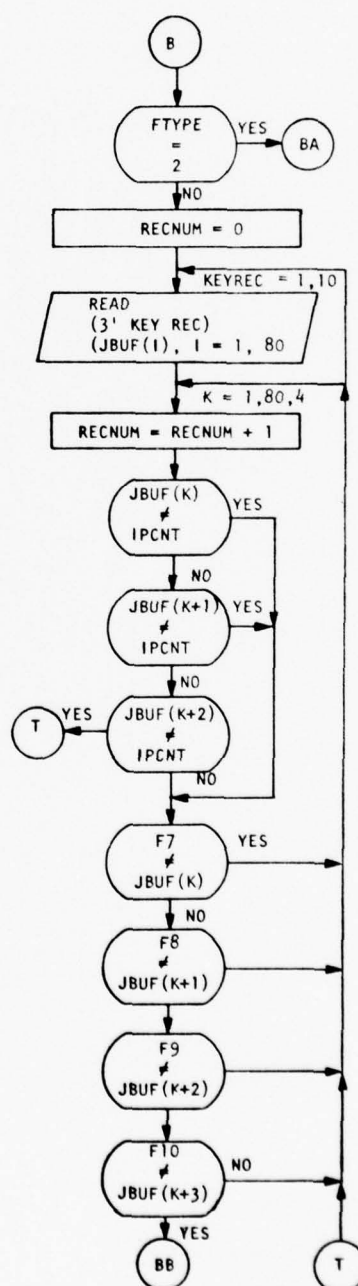
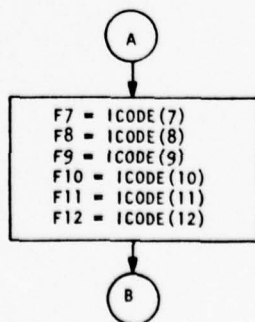
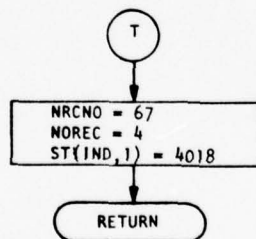
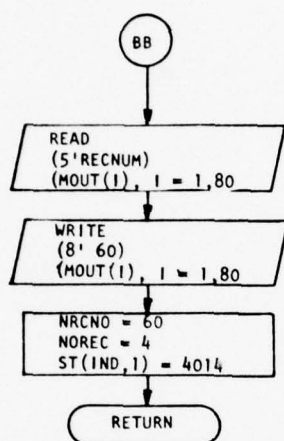
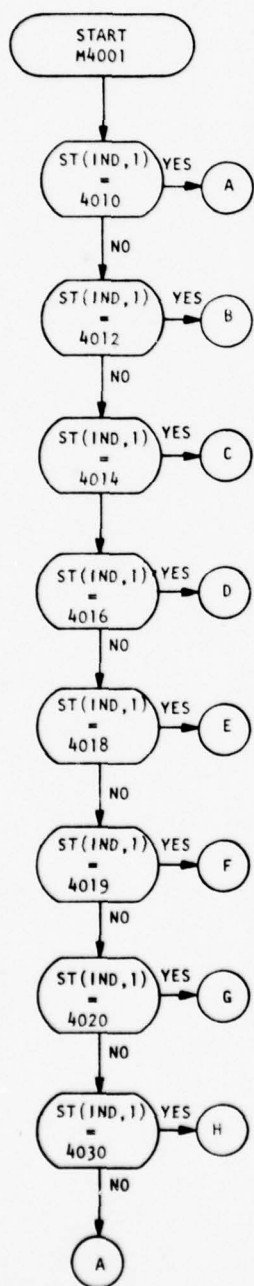


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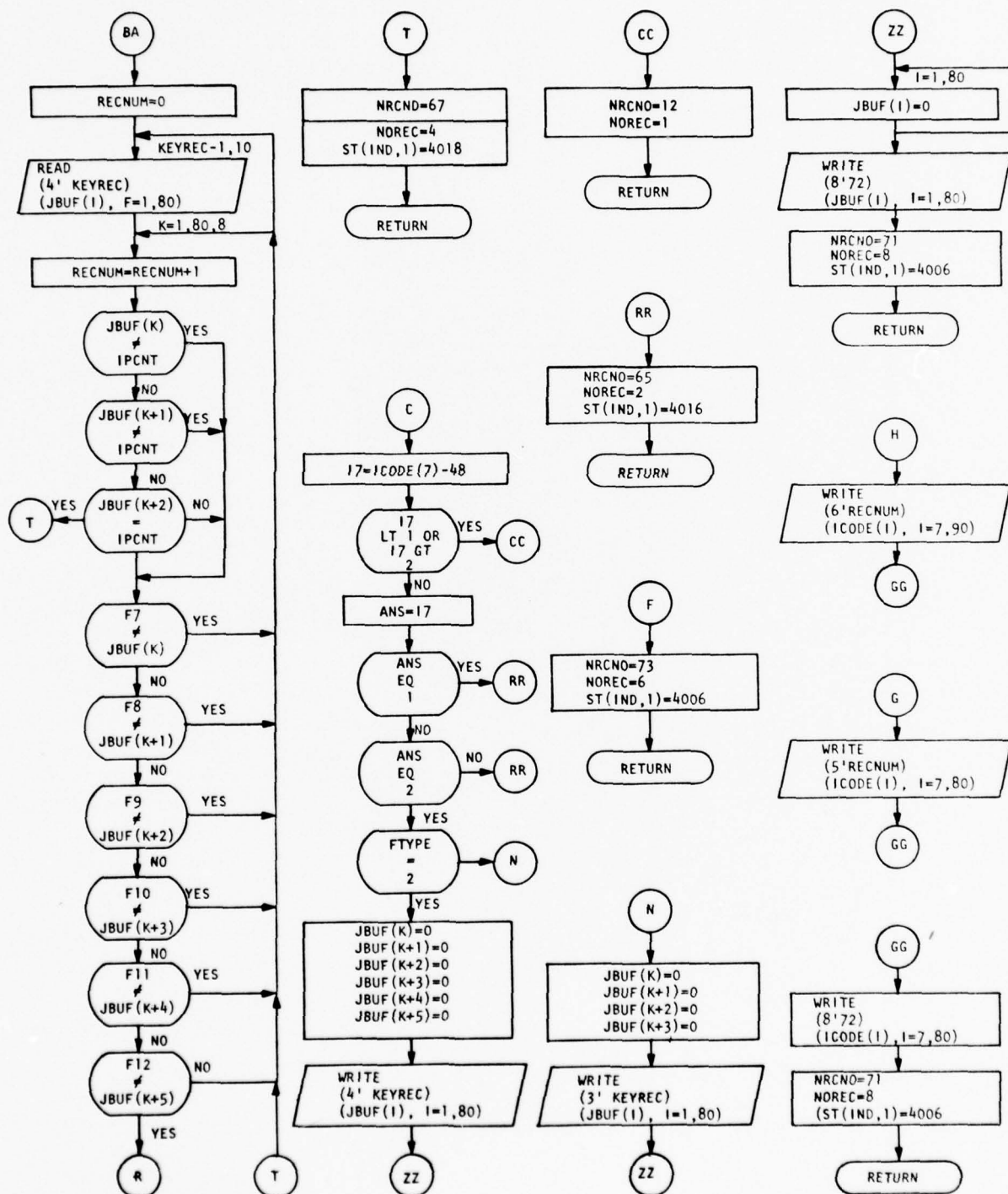


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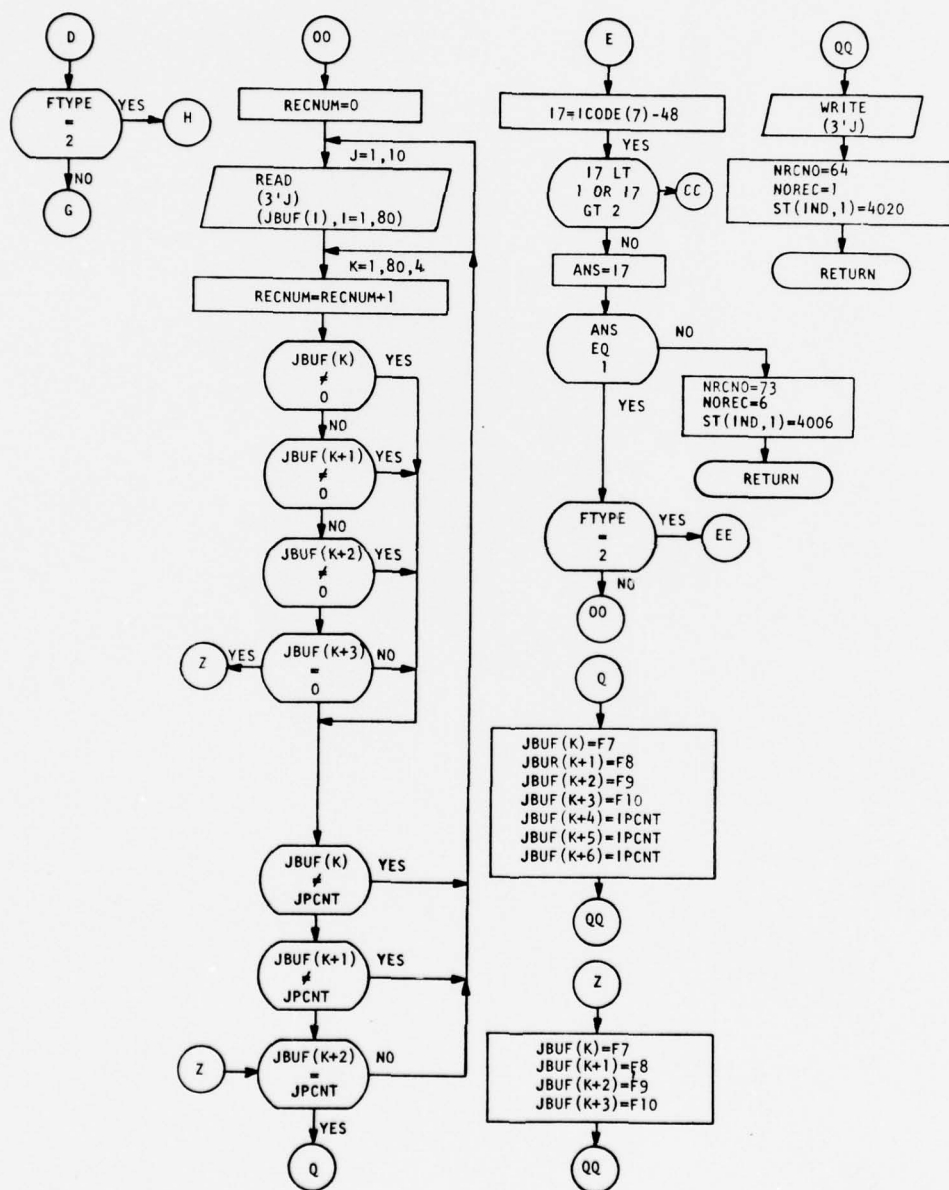




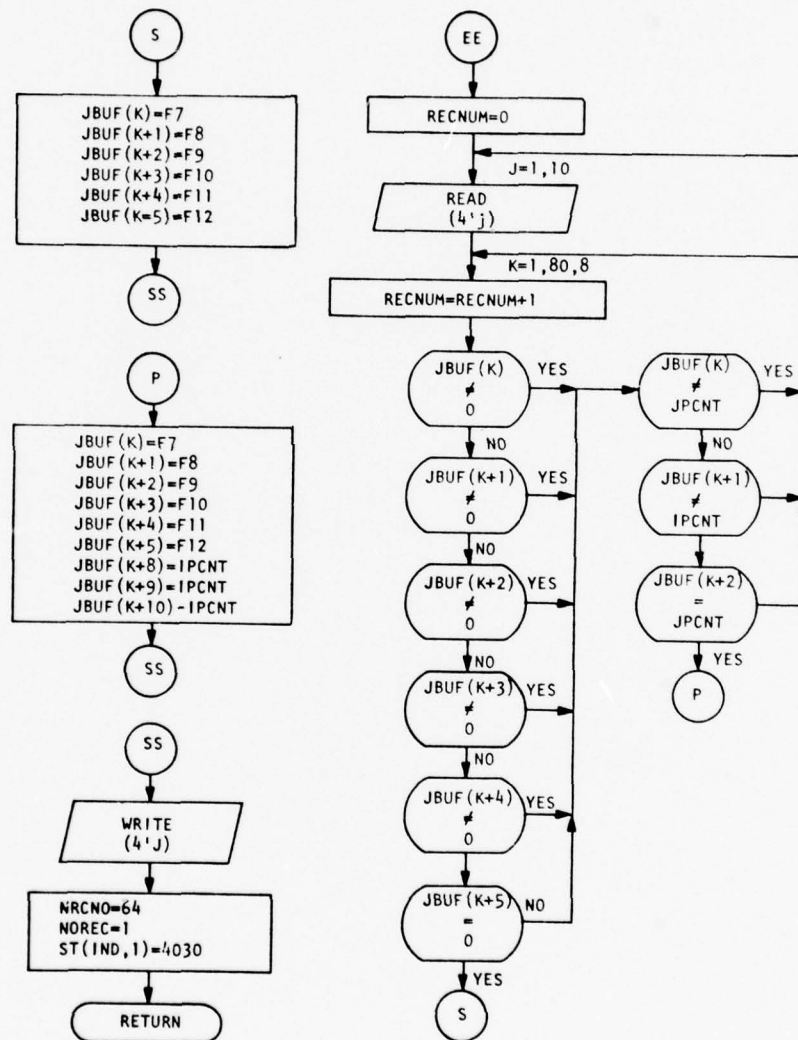
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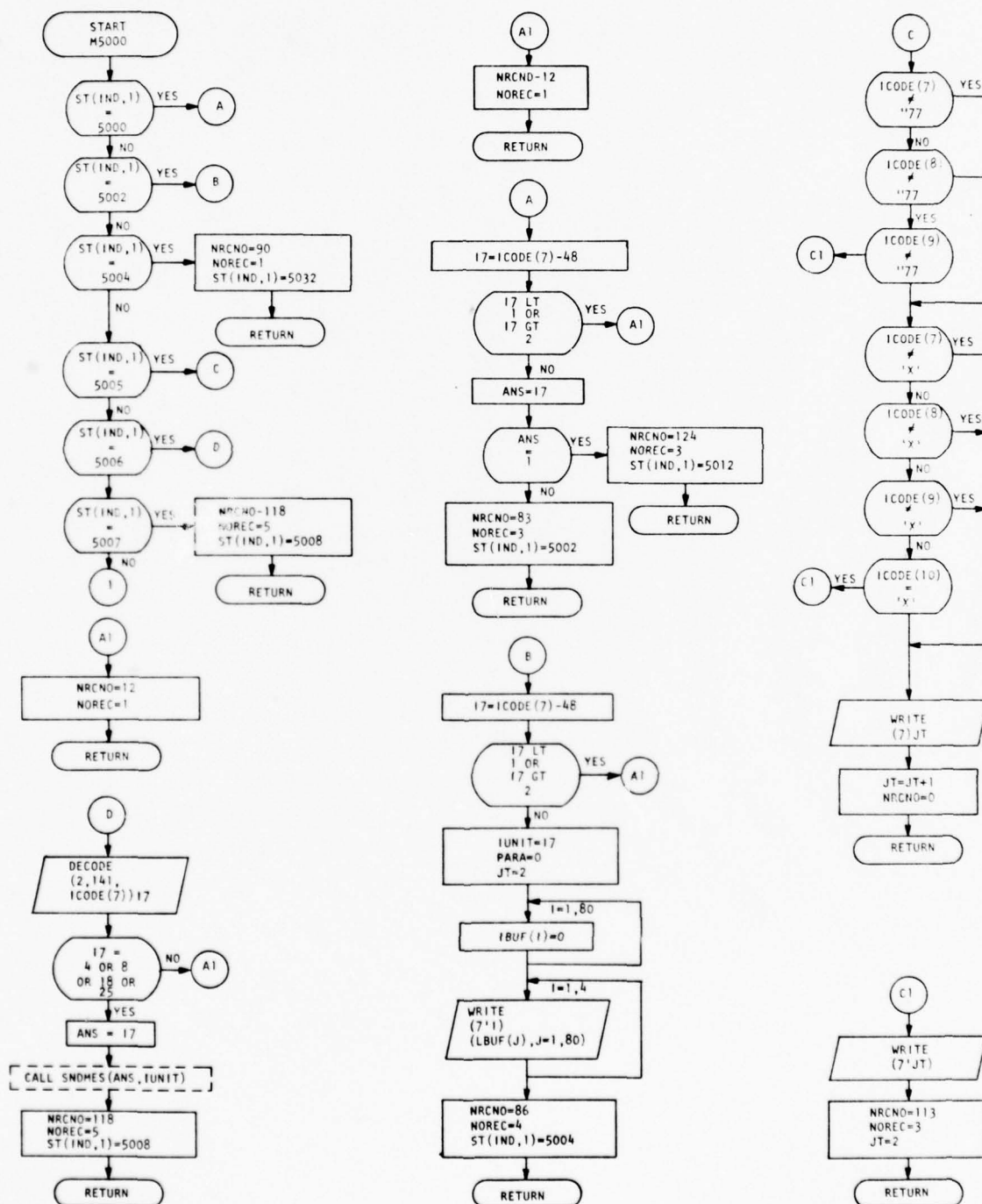
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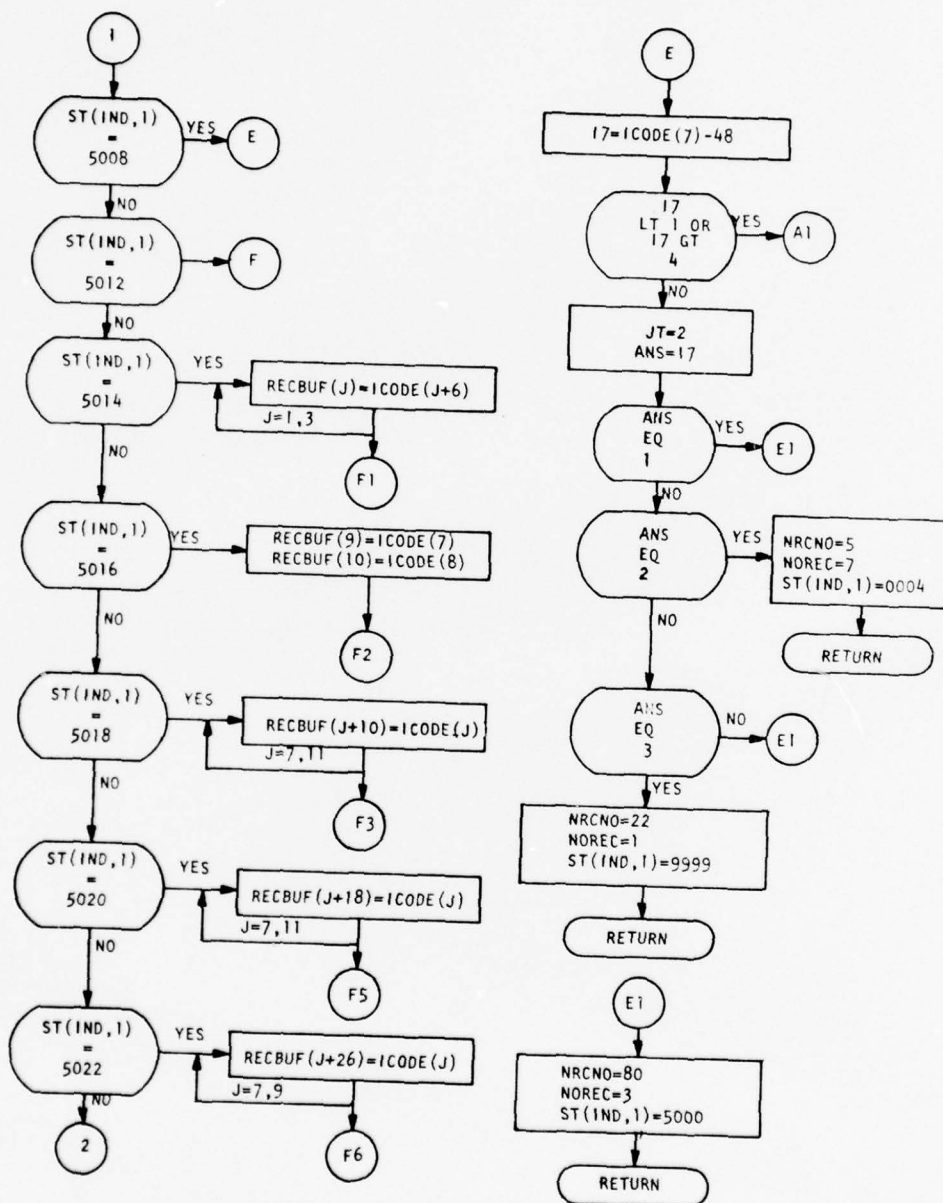
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M5000:

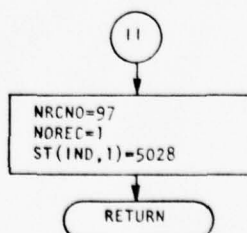
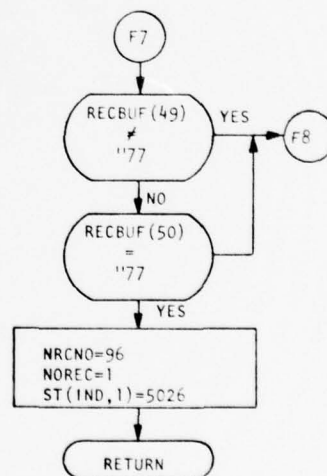
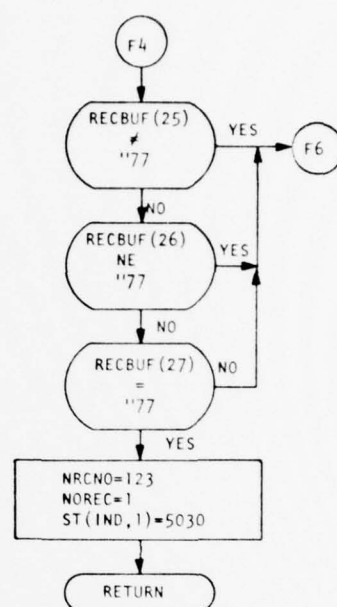
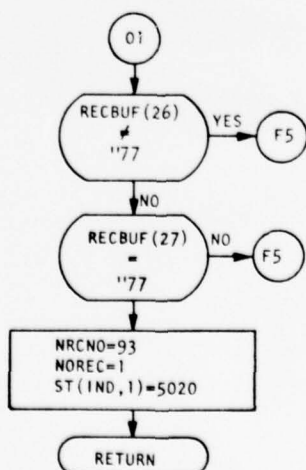
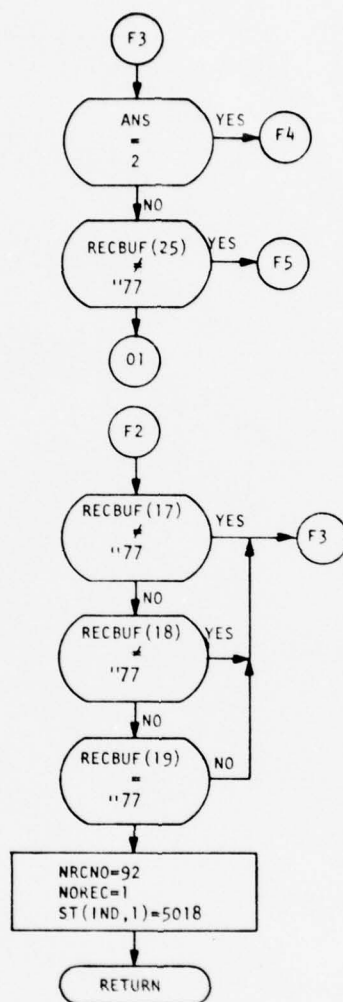
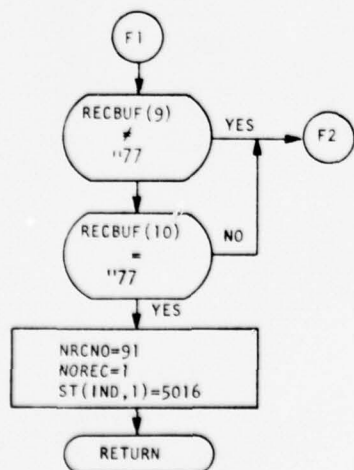
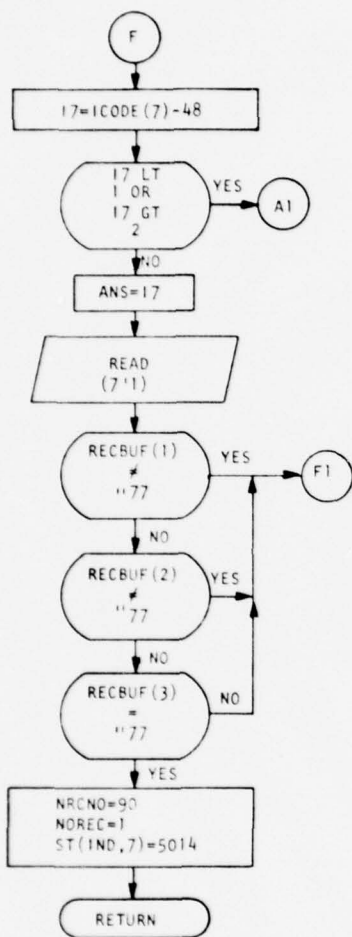


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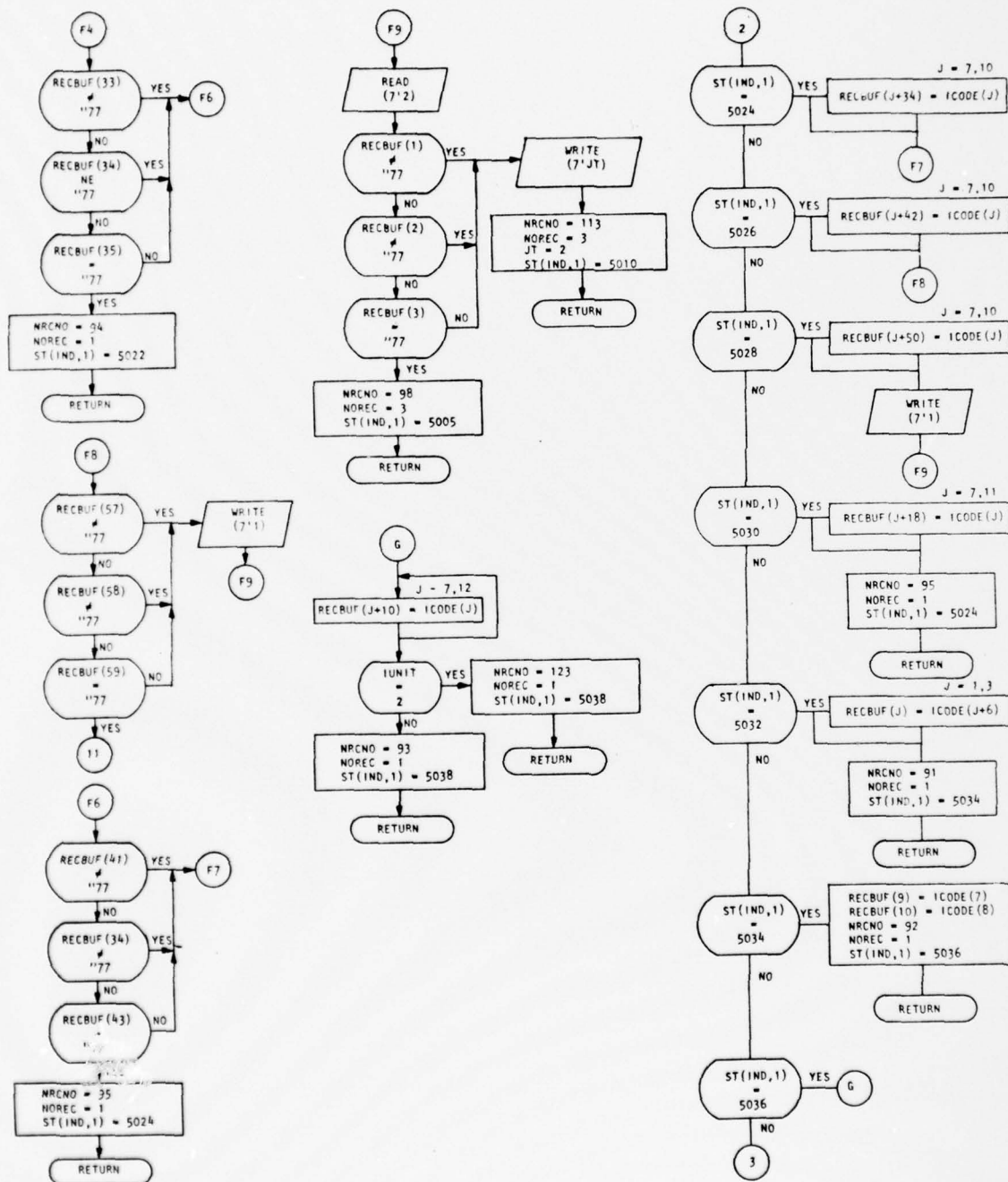




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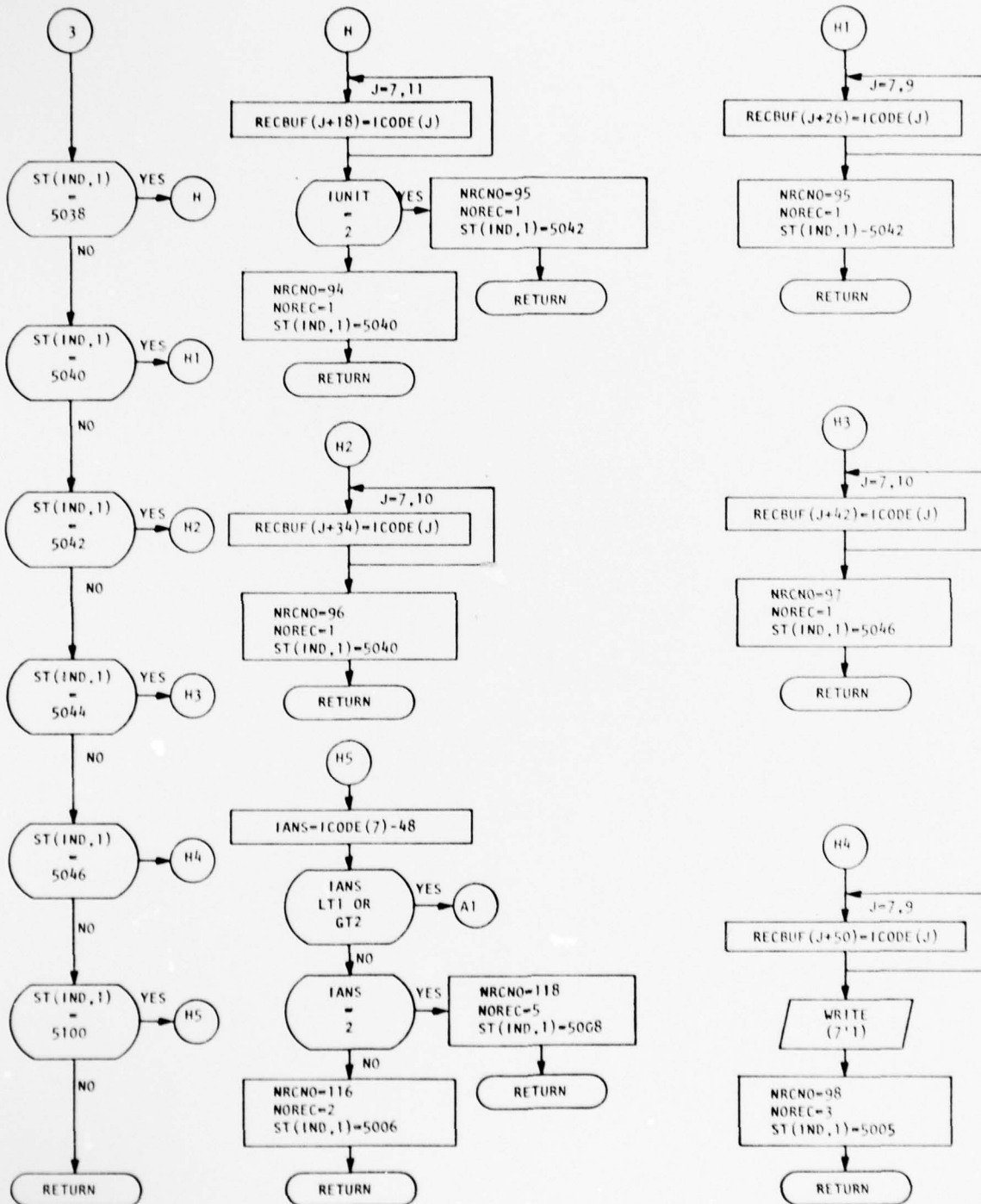


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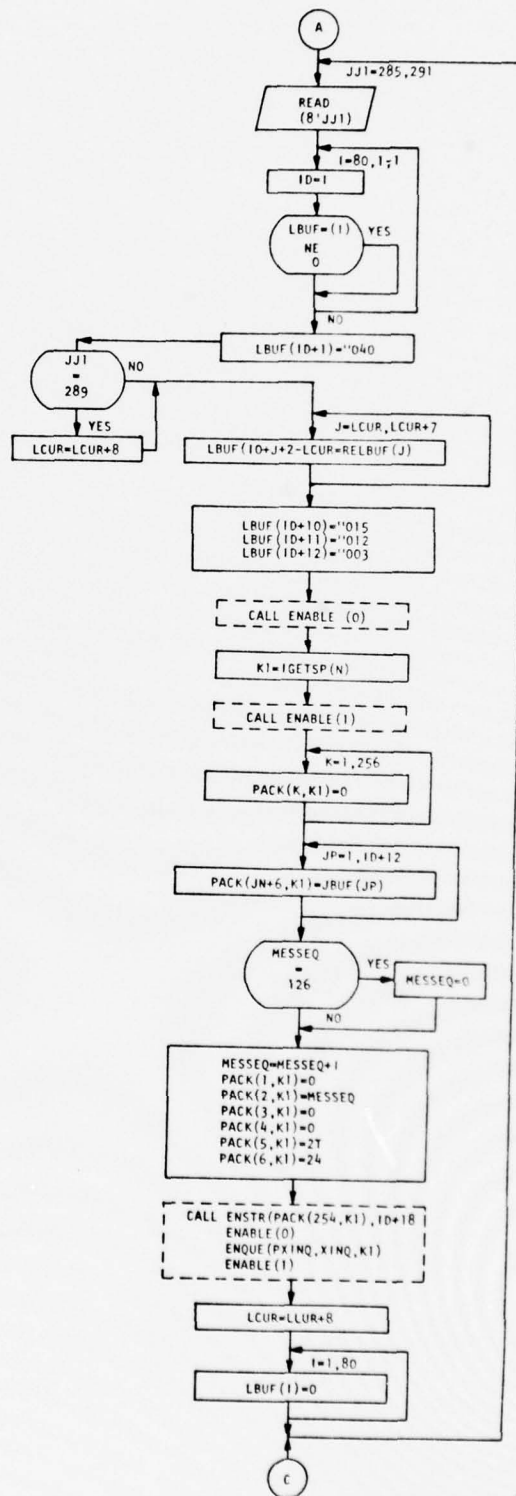
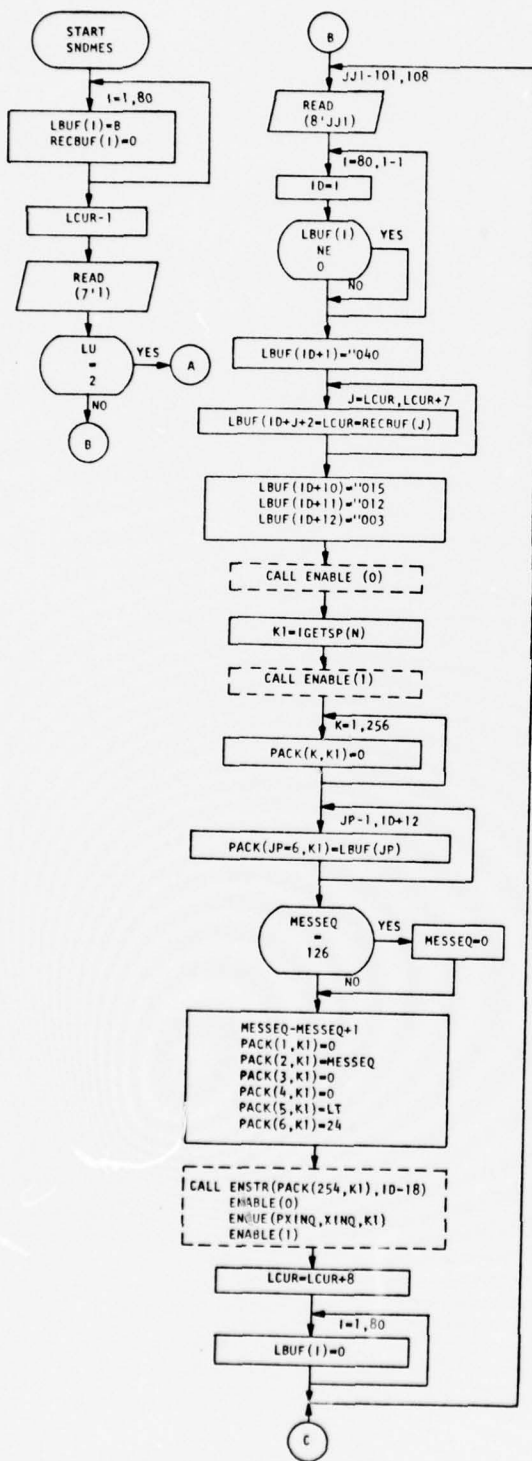




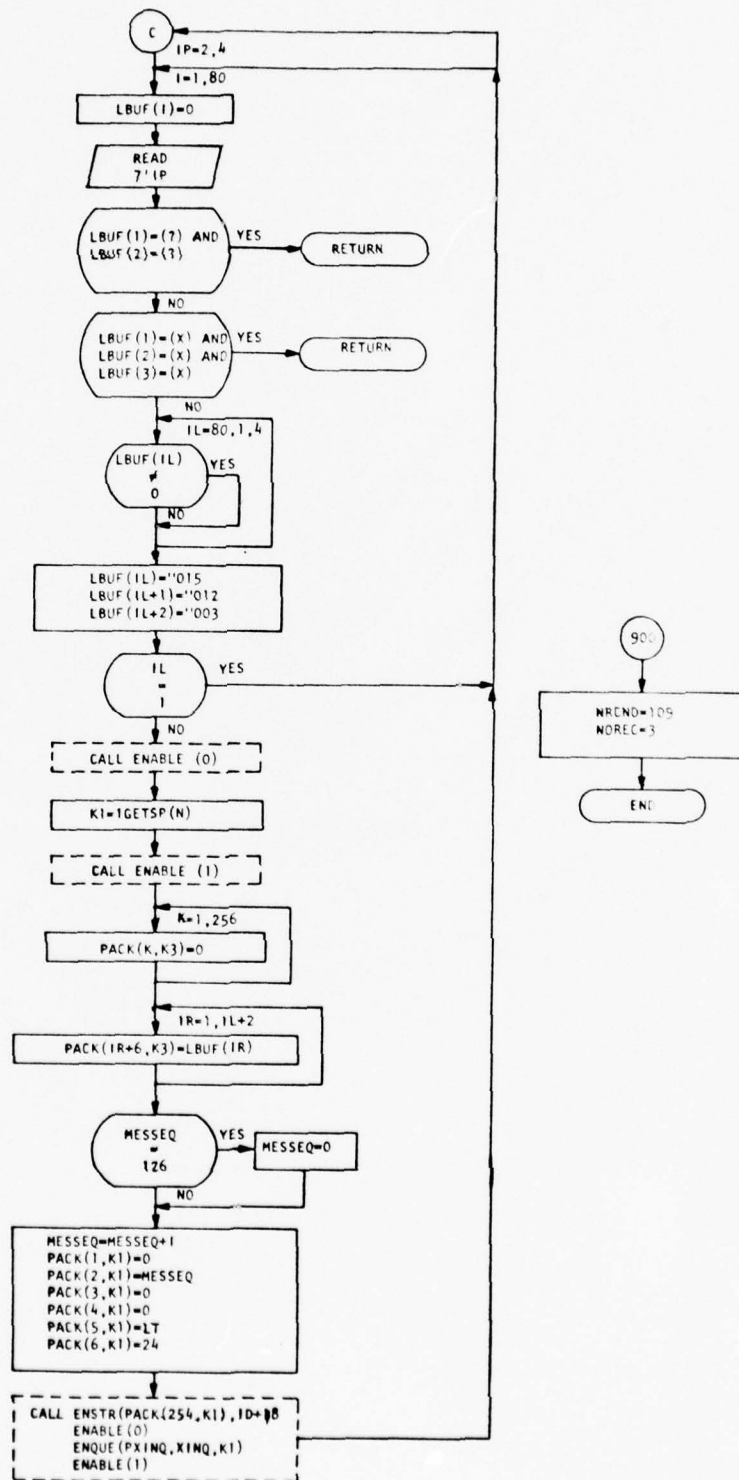
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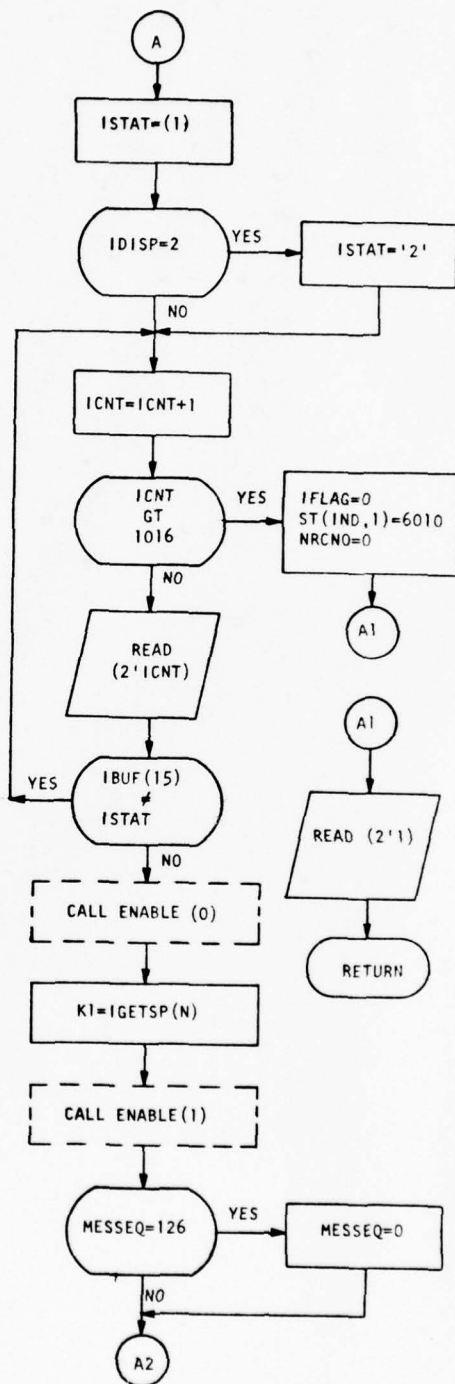
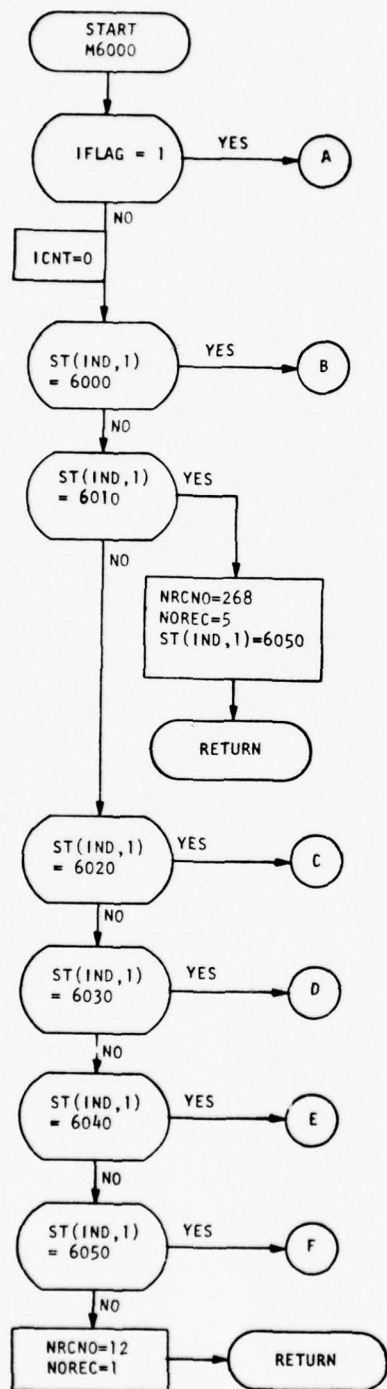
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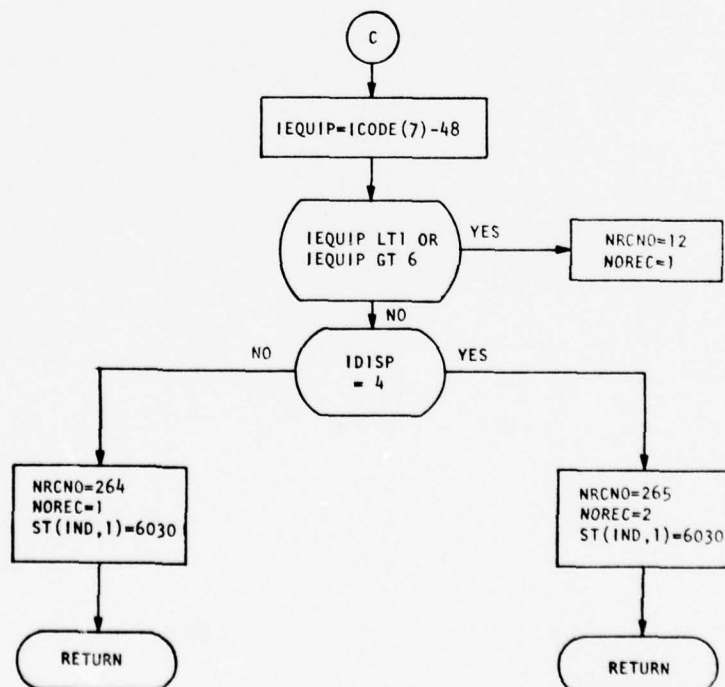
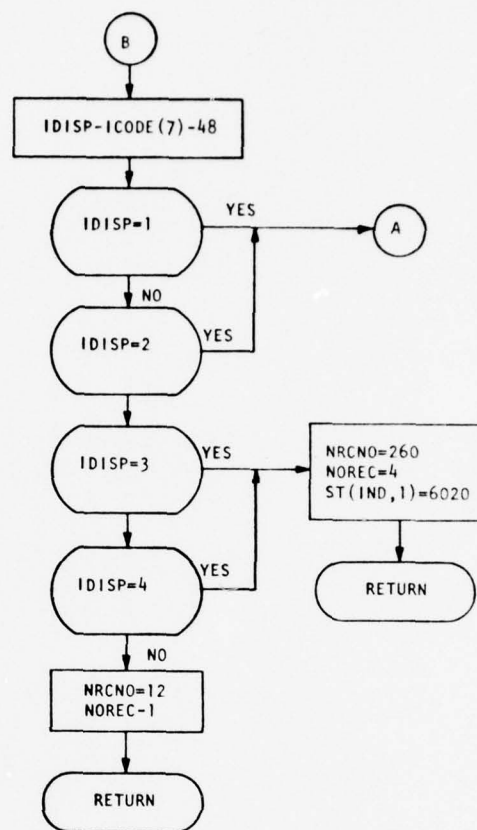
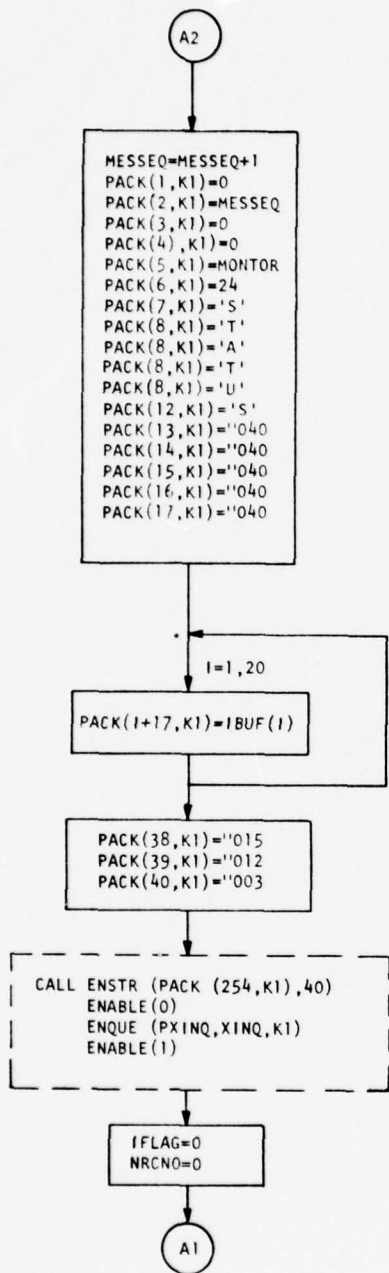
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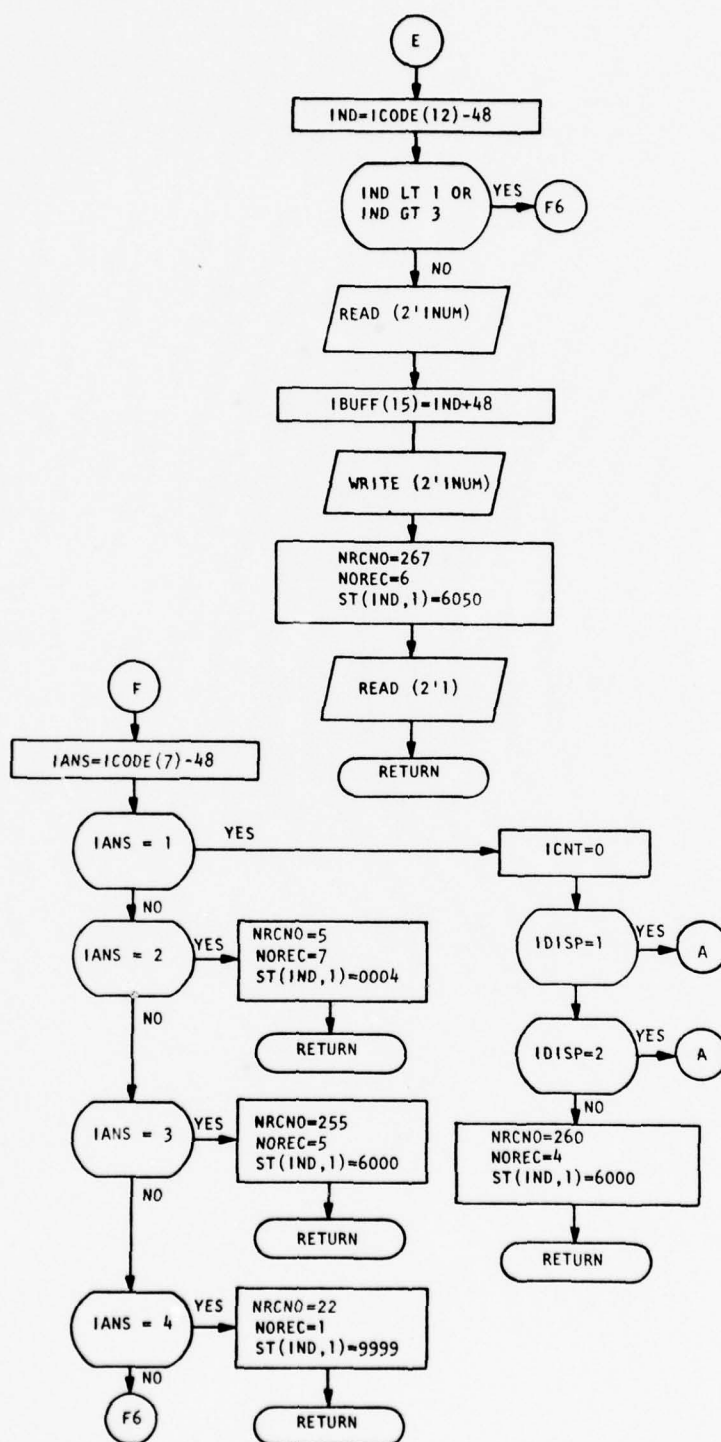
M6000:



M6000:

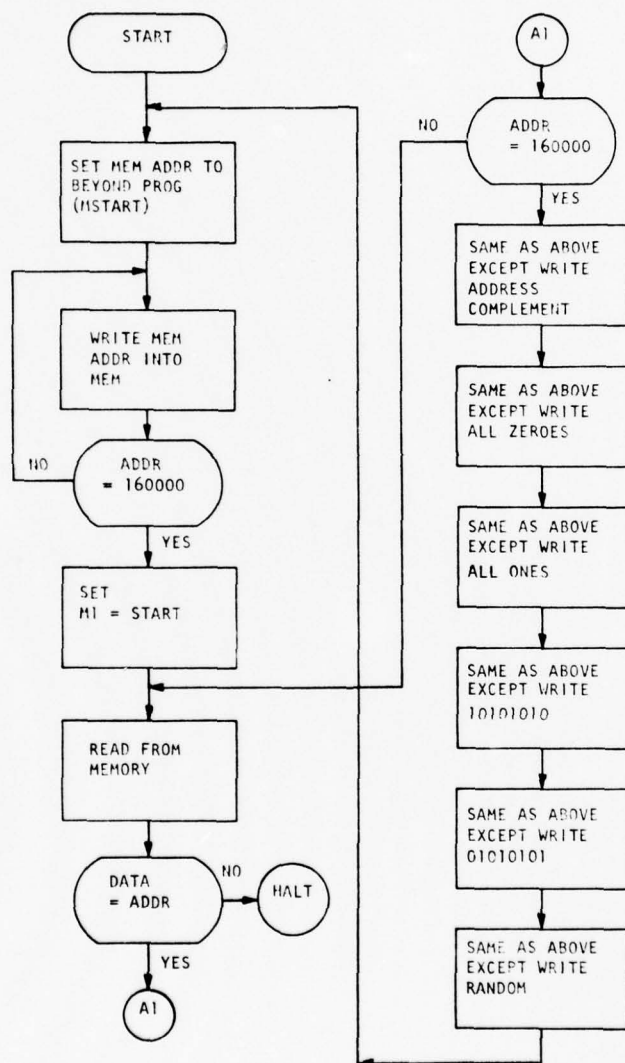


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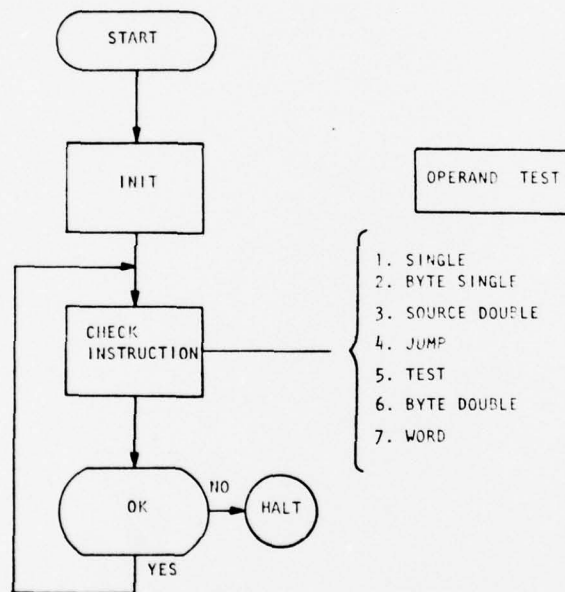


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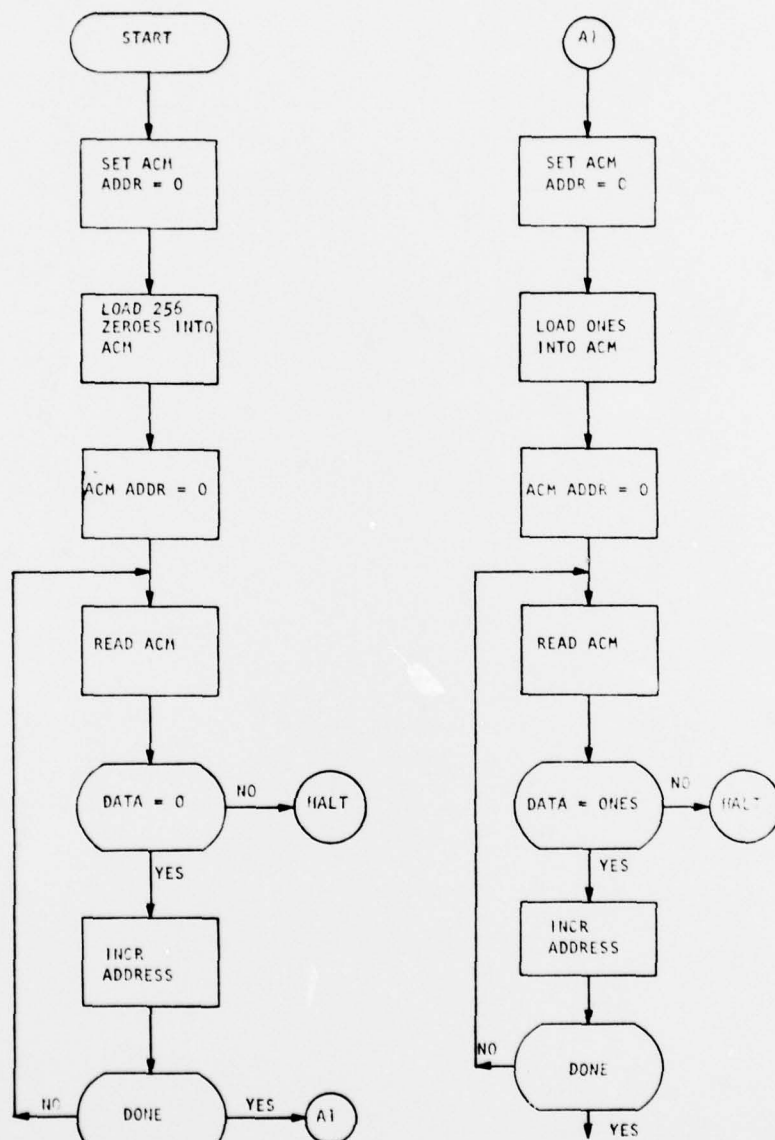




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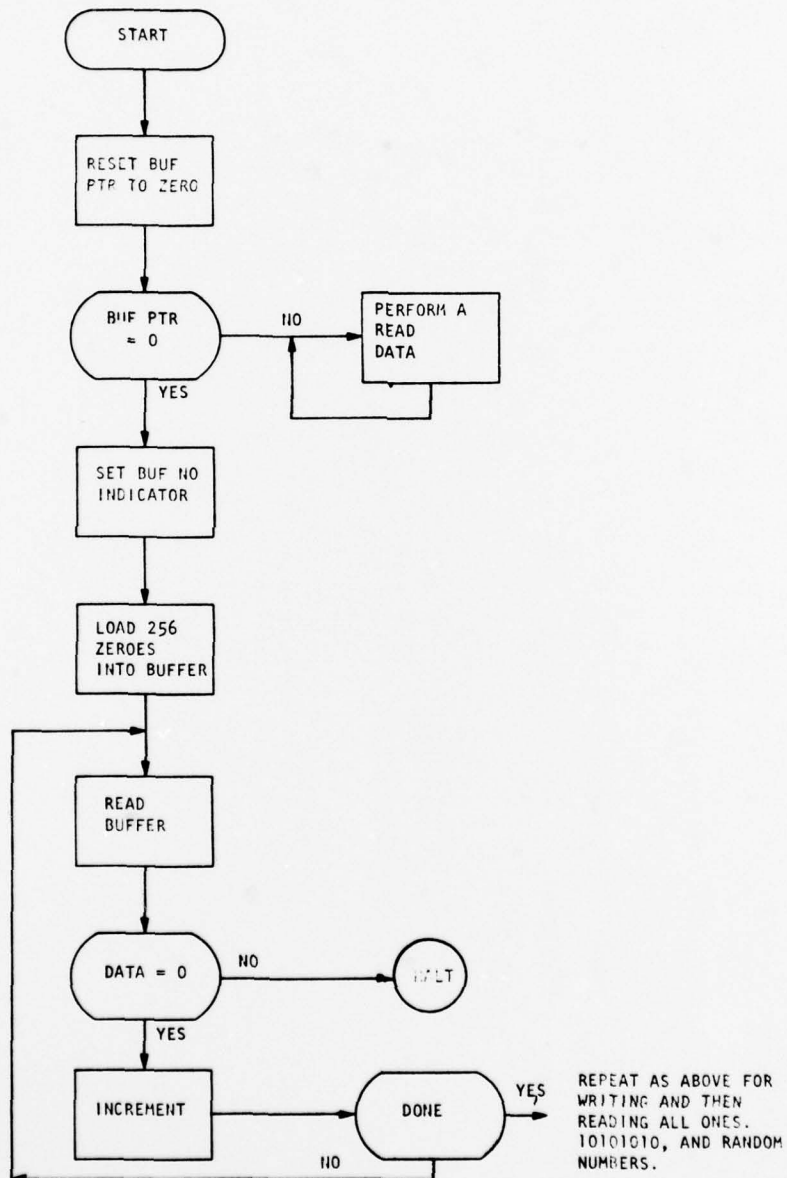


LIURAM:

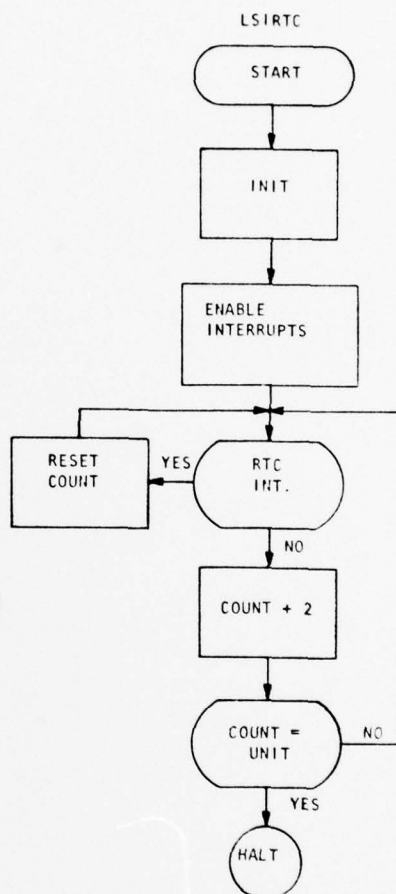
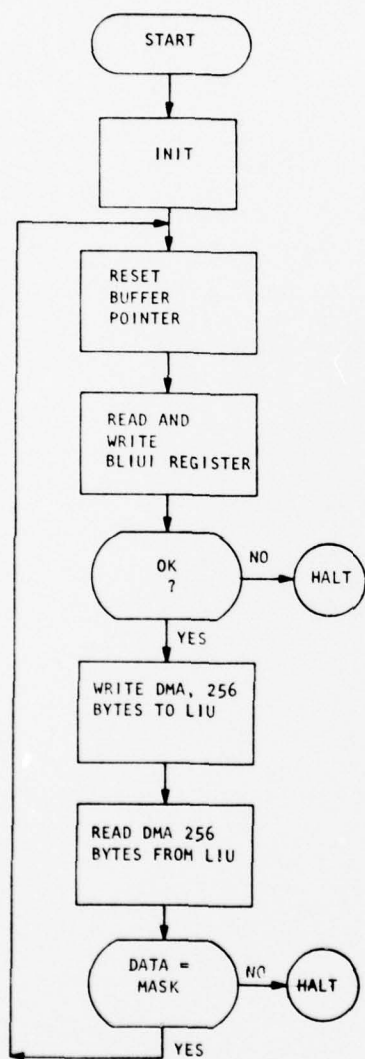


REPEAT AS ABOVE FOR WRITING AND  
THEN READING 1010 AND RANDOM #s.  
COMPARISON FAILURE AND JUMP

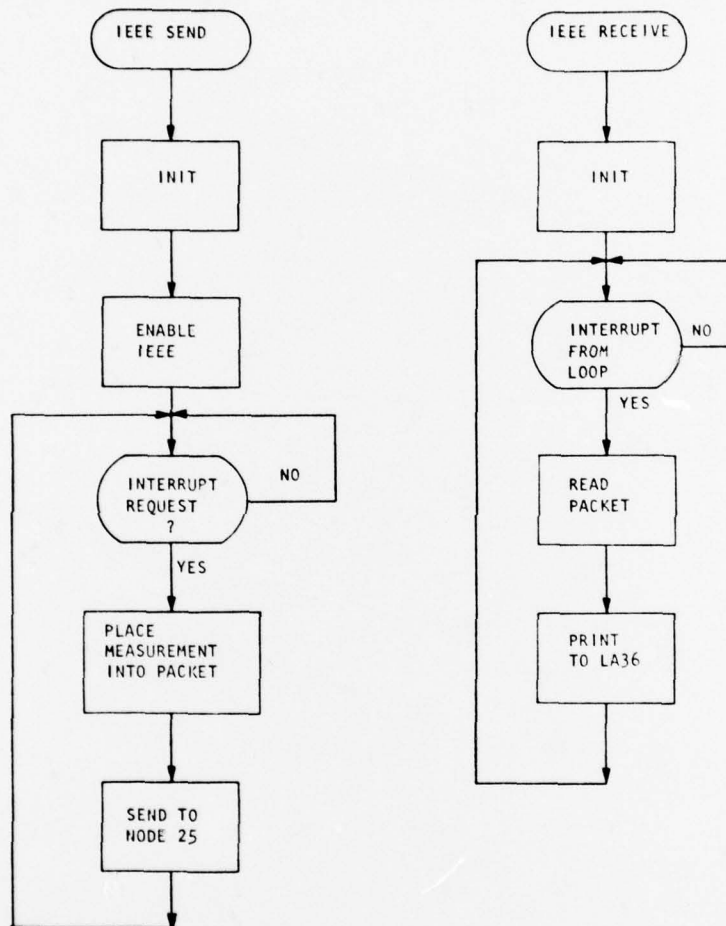
LIUBUF:



LIUINT:



IEEE:

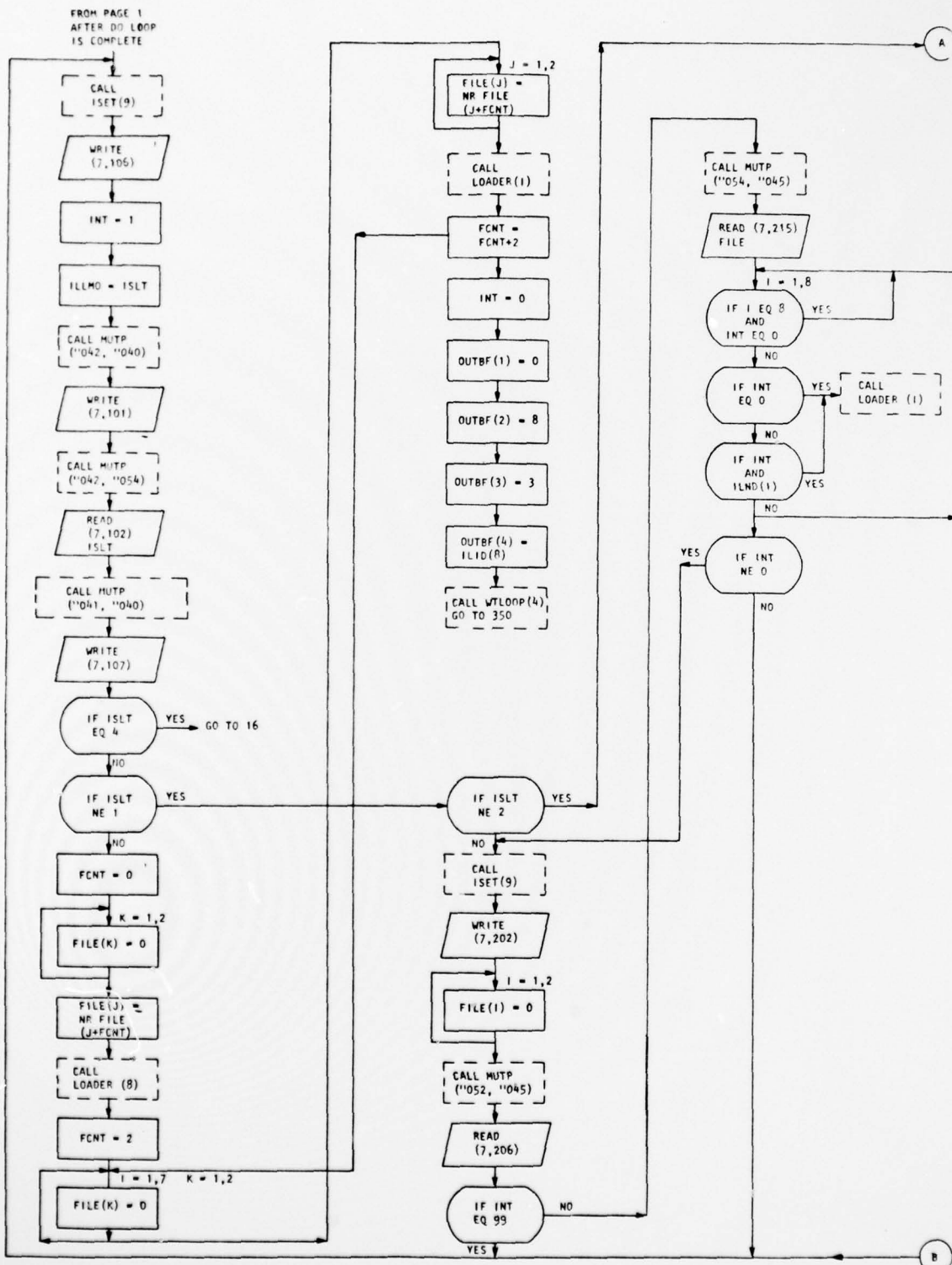


## I



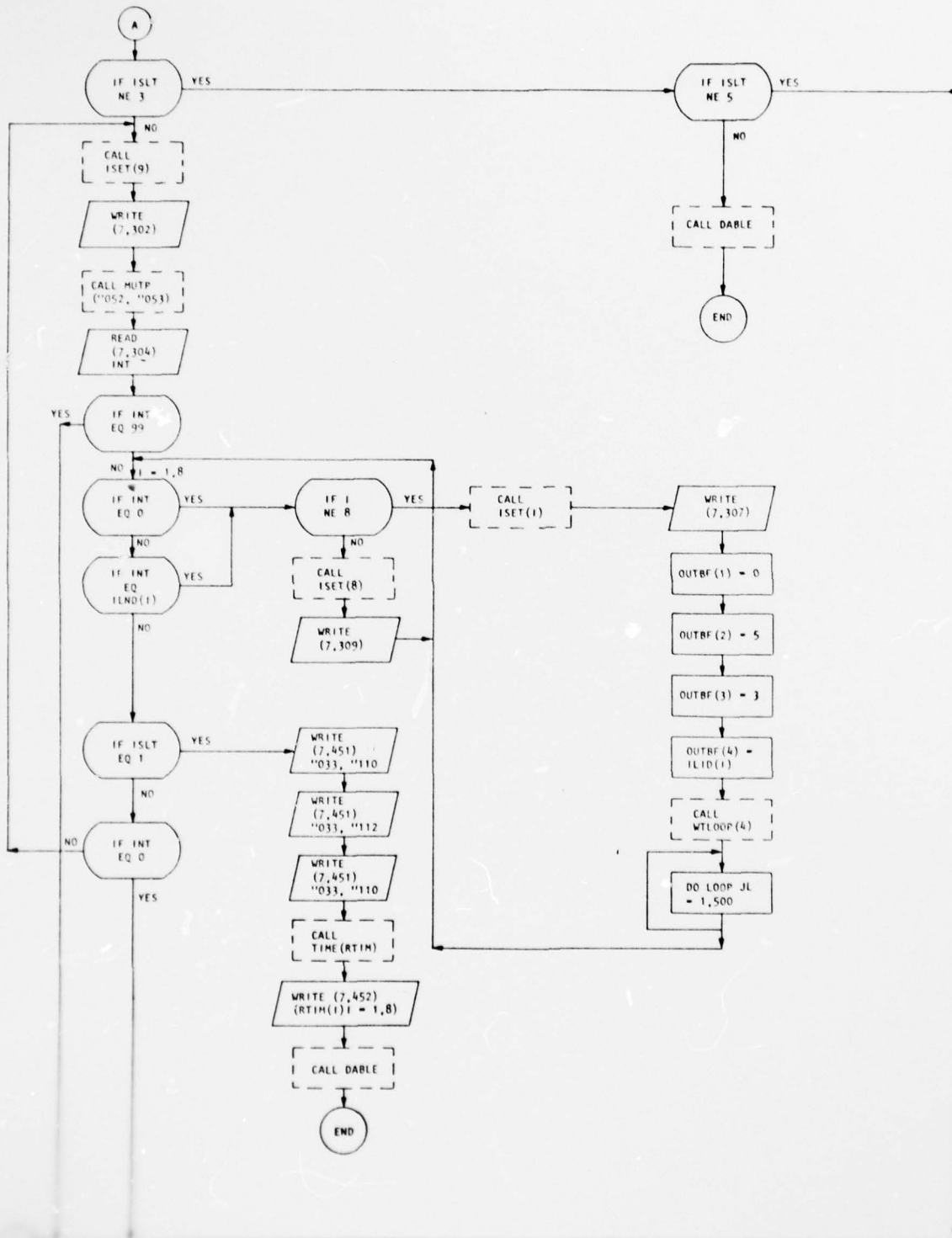


FDMLDR:

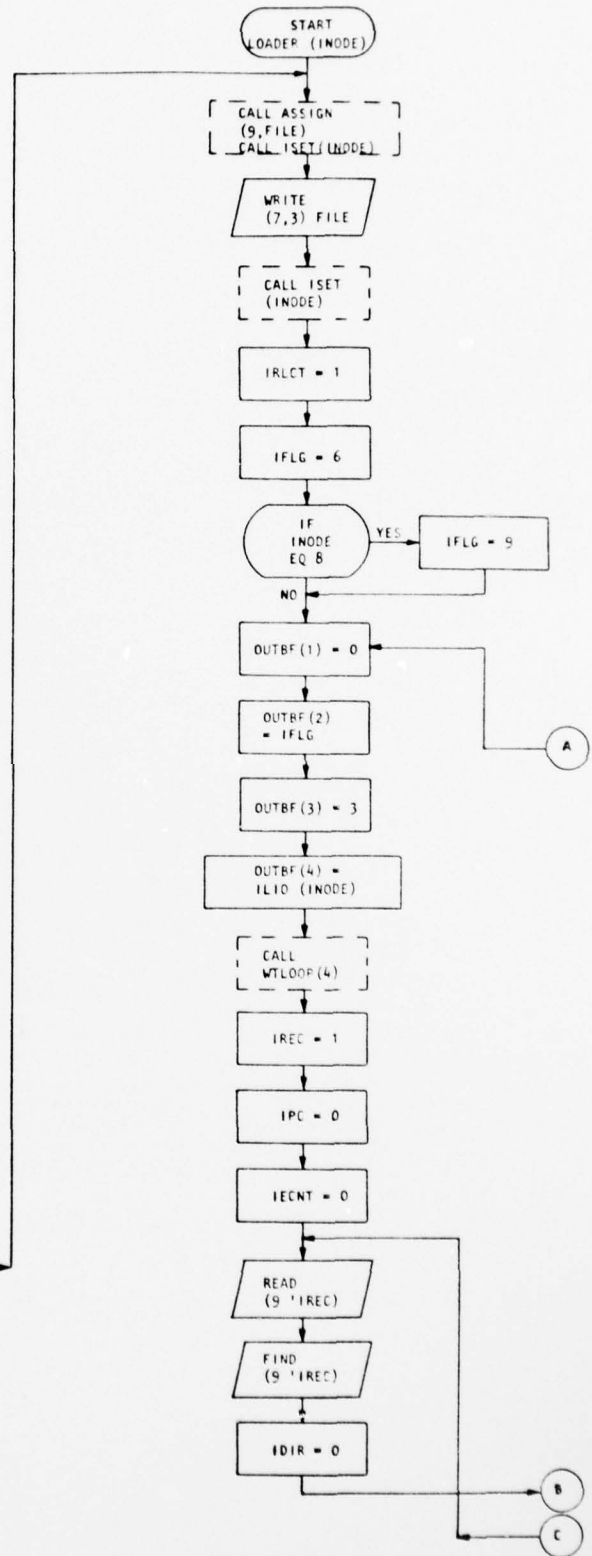
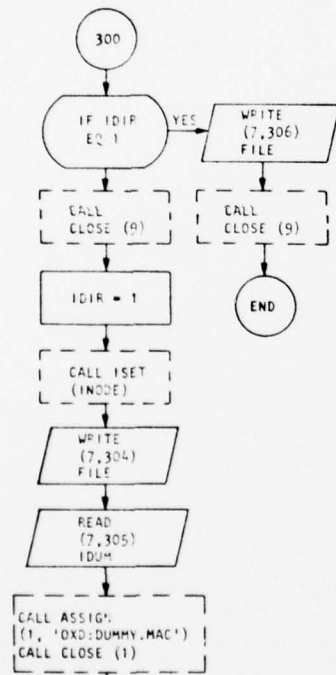
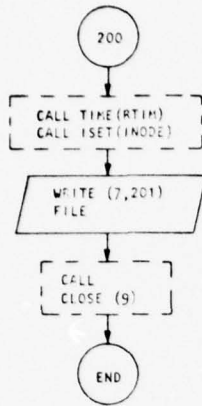




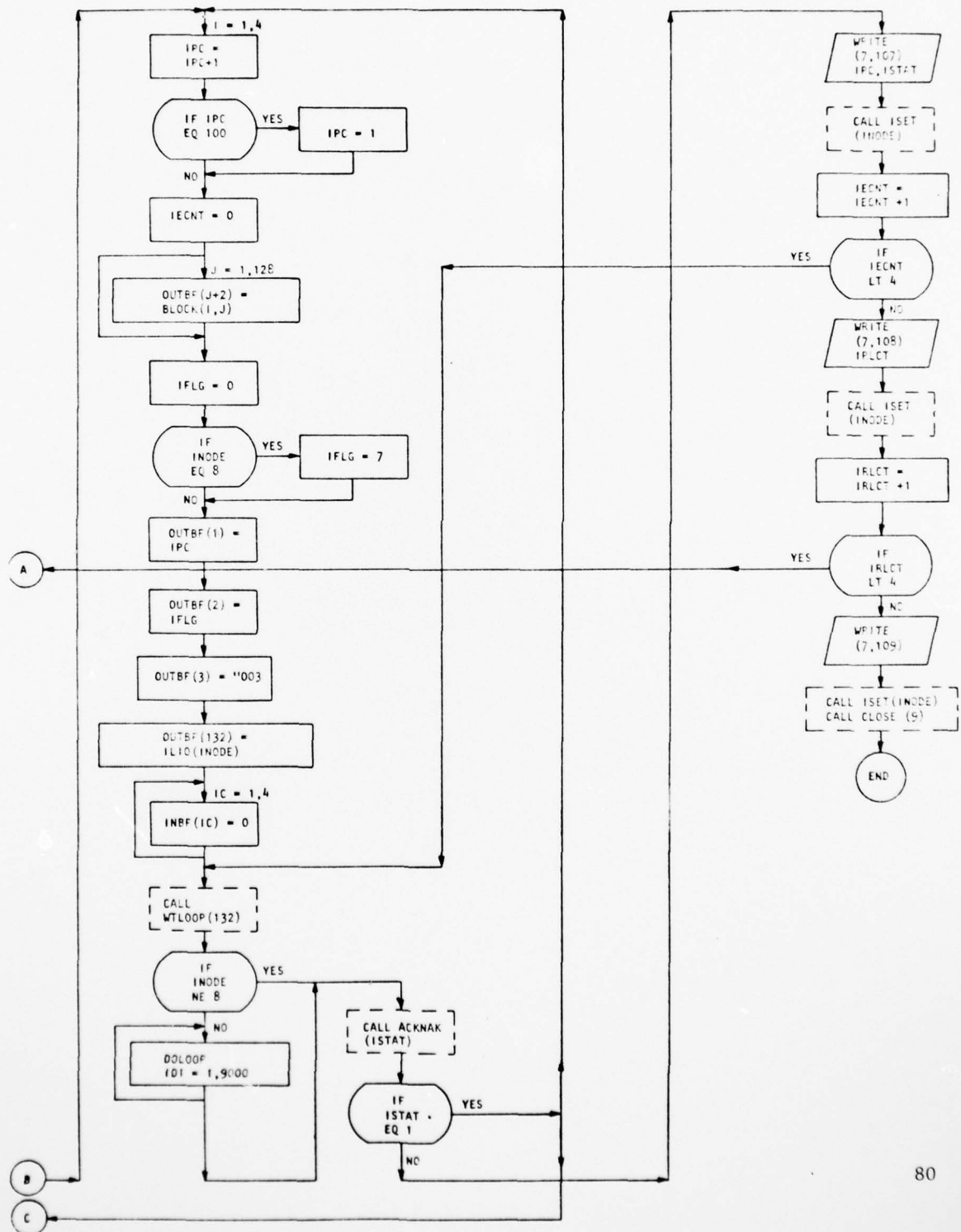
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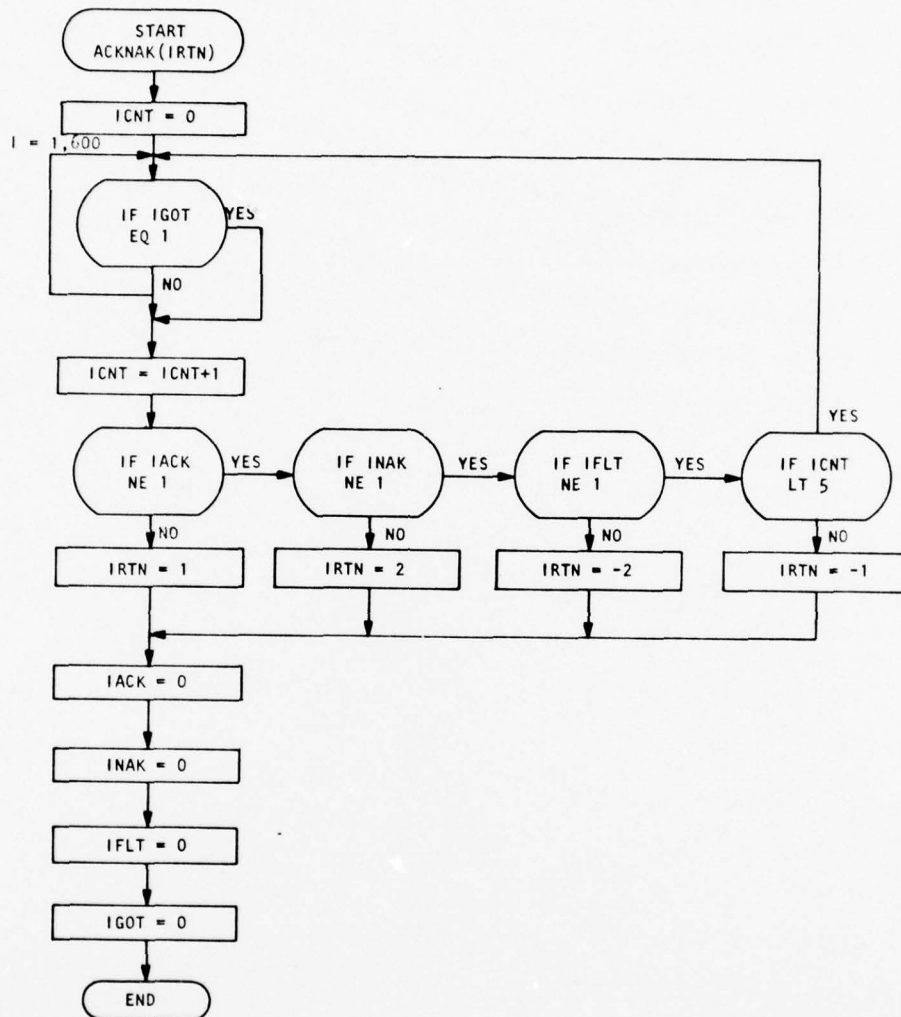
SUBROUTINE LOADER (INODE):



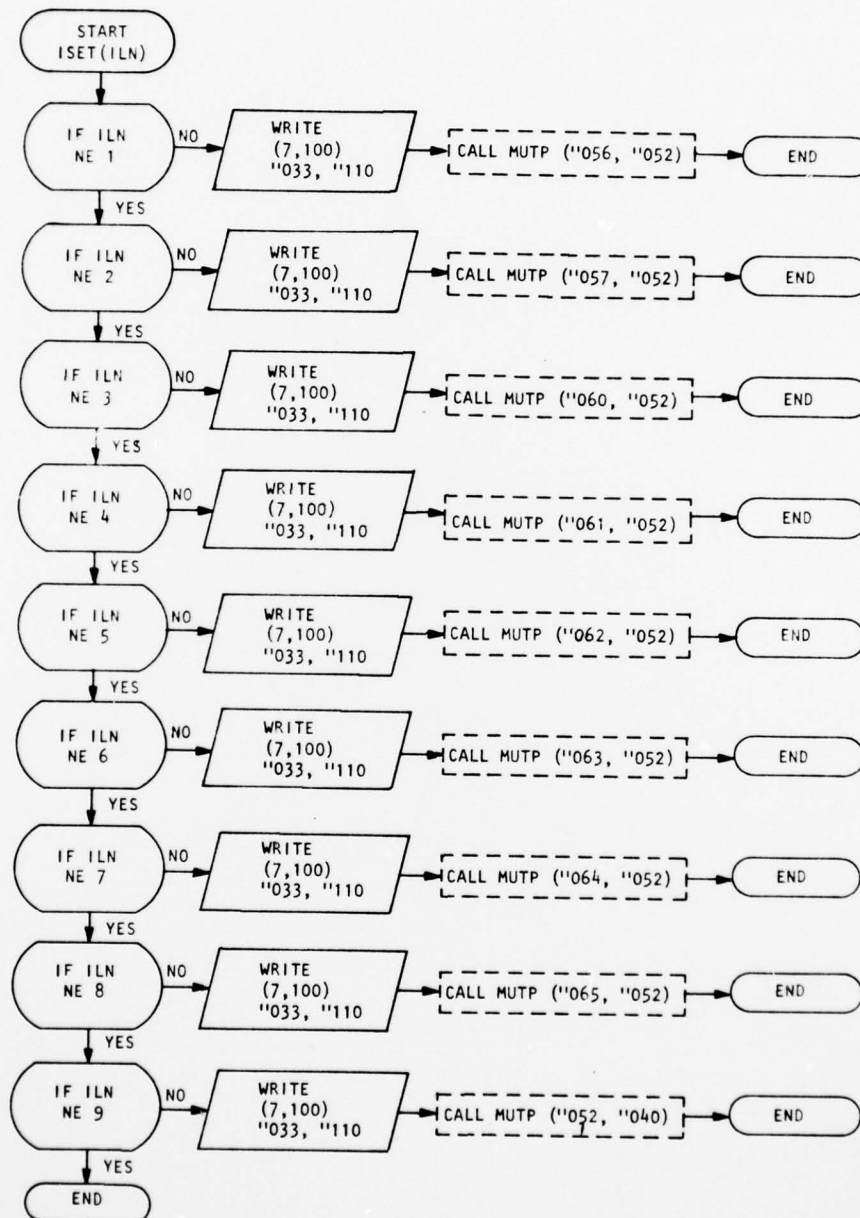
SUBROUTINE LOADER (INODE):



FDMLDR:

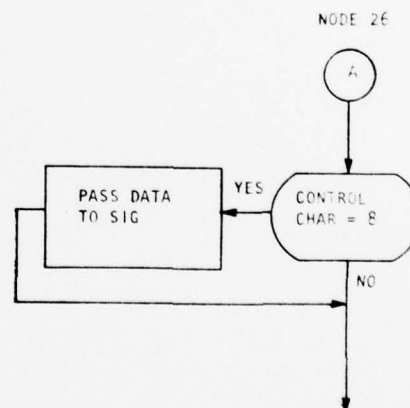
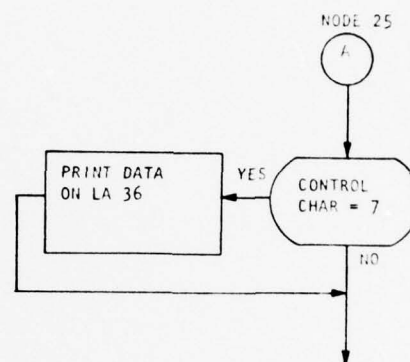
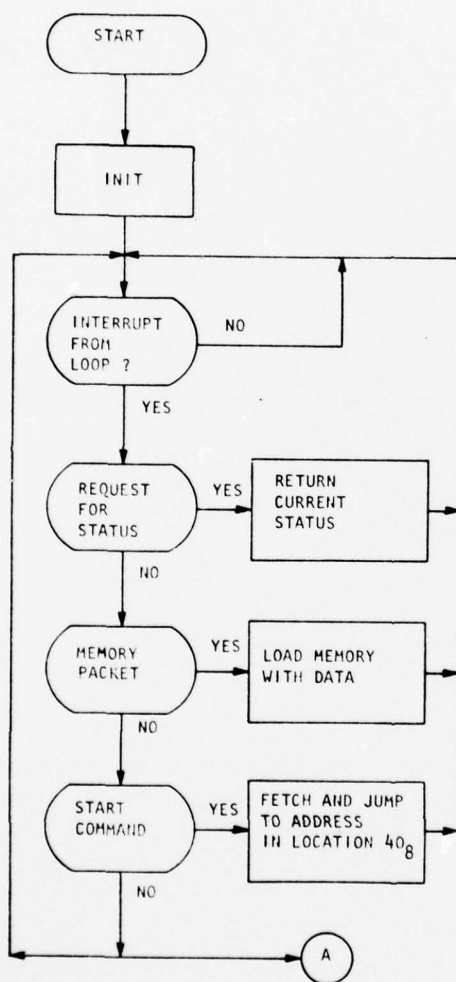


FDMDLR:



# LOADER PROM:

NODES 21,22,23,27, 28





LOADER PROM:

